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**MARKETING PROGRAM:
TRIPLER ARMY MEDICAL CENTER
HAWAII**

A Graduate Management Project
Submitted to the Faculty of
Baylor University
In Partial Fulfillment of the
Requirements for the Degree
of
Master of Health Administration
by
Major Michael R. Williams, MS
December 1990

91-03794



DTIC	AD-A237 774 A
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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION N/A		1b. RESTRICTIVE MARKINGS N/A	
2a. SECURITY CLASSIFICATION AUTHORITY N/A		3. DISTRIBUTION / AVAILABILITY OF REPORT UNCLASSIFIED/UNLIMITED	
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE N/A		5. MONITORING ORGANIZATION REPORT NUMBER(S)	
4. PERFORMING ORGANIZATION REPORT NUMBER(S) TAMC 1-90		7a. NAME OF MONITORING ORGANIZATION U.S. ARMY-BAYLOR UNIVERSITY GRADUATE PROGRAM IN HEALTH CARE ADMIN.	
5a. NAME OF PERFORMING ORGANIZATION TRIPLER ARMY MEDICAL CENTER	6b. OFFICE SYMBOL (if applicable) HSHK	7b. ADDRESS (City, State, and ZIP Code) AHS SAN ANTONIO, TEXAS 78234-6100	
5c. ADDRESS (City, State, and ZIP Code) TRIPLER ARMY MEDICAL CENTER TRIPLER AMC, HAWAII	8b. OFFICE SYMBOL (if applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8a. NAME OF FUNDING / SPONSORING ORGANIZATION	10. SOURCE OF FUNDING NUMBERS		
8c. ADDRESS (City, State, and ZIP Code)	PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.
			WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) MARKETING PROGRAM: TRIPLER ARMY MEDICAL CENTER, HAWAII (UNCLASSIFIED)			
12. PERSONAL AUTHOR(S) WILLIAMS, MICHAEL, ROBERT			
13a. TYPE OF REPORT FINAL	13b. TIME COVERED FROM 7-89 TO 10-90	14. DATE OF REPORT (Year, Month, Day) 90/10/29	15. PAGE COUNT 131
16. SUPPLEMENTARY NOTATION			
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)	
FIELD	GROUP	SUB-GROUP	
19. ABSTRACT (Continue on reverse if necessary and identify by block number)			
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20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS		21. ABSTRACT SECURITY CLASSIFICATION N/A	
22a. NAME OF RESPONSIBLE INDIVIDUAL MICHAEL R. WILLIAMS. MAJ. MS		22b. TELEPHONE (Include Area Code) 808-433-5123	22c. OFFICE SYMBOL HSHK-DM

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ACKNOWLEDGEMENT

I would like to dedicate this Graduate Management Project to my wife, Cindy. She is truly the most loving and supportive wife any man could ever hope for!

ABSTRACT

The purpose of this study was to develop the initial framework upon which to build an effective marketing program for improving patient satisfaction with outpatient care at Tripler Army Medical Center (Tripler). The four phases of a marketing program are: (1) planning, (2) market plan, (3) implementation, and (4) results and evaluation. The market research instrument for this study was a Patient Opinion Survey which was statistically proven to be valid and reliable. Data was collected from a representative sample of the beneficiary population based on the various status categories (active duty, active duty dependent...). Each individual surveyed had just completed a visit with a physician at one of eight major outpatient clinics at Tripler. Multiple regression analysis was performed on the four domains of physician competency, amenities, courtesy, and education. The domains of amenities and courtesy proved to be statistically significant in demonstrating a high degree of association with overall patient satisfaction. Additionally, the amenities domain revealed the greatest amount of dissatisfaction while the courtesy domain indicated the highest degree of satisfaction. Further statistical analysis was performed to determine which of the twenty-one factors contained within the four domains revealed levels of dissatisfaction sufficient enough to warrant being addressed in the market plan. The short-term objectives of the market plan involve improvements in the following areas: (1) patient parking, (2) television reception, (3) health fairs, (4) awards program, and (5) motto/logo. The long-term plan represents the dedication of a considerable amount of resources (money, personnel, time...) for the following areas: (1) 24-hour nurse hotline, (2) competency image of military physicians, (3) day care, and (4) CHAMPUS Prime/Extra education. The principle means of promoting the positive aspects of receiving care at Tripler and the new initiatives designed to improve patient satisfaction is a direct mail brochure that is produced by a professional advertising agency. Good deeds are only effective when accompanied by good words. The primary benefits of a successful marketing program are improved patient satisfaction, improved image for Tripler, and increased funding and staffing from higher headquarters.

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CHAPTER I.
INTRODUCTION

BACKGROUND

Two of the greatest problems confronting the United States Government today deal with how to reduce the national deficit and balance the annual budget. Any attempts at resolving these issues will result in significant Department of Defense (DoD) budget cuts. A portion of these budget reductions will be shared by the Army Medical Department (AMEDD), its medical centers, and its community hospitals.

Consequently, Tripler Army Medical Center (Tripler) will be placed in a position in which it must continue its mission to provide quality medical care to its active duty population and to the greatest extent possible other beneficiaries, but with fewer resources for personnel, supplies, equipment, and maintenance. This means the medical center will have to make tough decisions such as reducing or eliminating the availability of some services, limiting services to only specific categories of beneficiaries, and/or providing services in a less than optimal environment.

For senior management to make the best possible decisions about reductions or changes in services, the needs, wants, and perceptions of the beneficiaries must be taken into consideration. Additionally, senior management must develop an effective means of communicating their decisions and the rationale behind them to the catchment

area population. Failure to do so will cause the reputation of Tripler, as a health care facility dedicated to providing quality medical care, to suffer.

PURPOSE OF THE STUDY

The purpose of this Graduate Management Project is to develop the framework for an effective marketing program that will increase the level of satisfaction with respect to the outpatient care received by eligible beneficiaries at Tripler Army Medical Center. The market research instrument will identify and prioritize those areas with which the beneficiaries are the most dissatisfied. This information will enable senior management to better allocate resources to meet the needs and wants of the catchment area population. The market plan itself will be designed to (1) make improvements where possible to increase satisfaction, (2) inform the beneficiaries of implemented improvements, and (3) improve Tripler's image by reversing negative perceptions which are unjustified.

STATEMENT OF THE MANAGEMENT PROBLEM

The problem of this study is to develop the framework for an effective marketing program for outpatient care provided by Tripler Army Medical Center, Hawaii.

CHAPTER II.
LITERATURE REVIEW

HEALTH CARE MARKETING

The same principles associated with commercial marketing are applicable to marketing health services (Lovelock, 1984). Marketing is the process concerned with the initiation, resolution, and/or avoidance of exchange relationships with the ultimate goal of each exchange being consummated in need(s) satisfaction. In simplistic terms, marketing is a business which operates by the principle that an organization which serves the consumer, serves itself (Dodson, 1988). Kotler defines marketing as, "the function that identifies current unfulfilled needs and wants, defines and measures their magnitude, determines which target markets the organization can best serve, and decides on appropriate products, services, and programs to serve the markets" (Kotler, 1984). The success of marketing involves using effective pricing, communication, and distribution to inform, motivate, and service the target markets with respect to their needs and desires (Kotler, 1982). In order for an organization to be successful in implementing its goals, satisfying the consumer, and fulfilling social responsibilities it must be able to balance the external environment's demands with the organization's internal needs and limitations (Dobson, 1988).

Ruderman differentiates between commercial marketing and social marketing. Commercial marketing involves

studying the wants of consumers in order to determine which products will satisfy the wants. Social marketing involves modifying or creating wants among the consumers which are good for them such as health education (Ruderman, 1986). The importance of marketing is that it links the organization to the environment, external and internal (Lovelock, 1984).

Marketing in the health care industry is still in its embryonic stage, especially for public and nonprofit hospitals (Lovelock, 1984). Tripler is a medical facility which provides medical care at no cost to its beneficiaries based on funding from the U.S. Government. As such, Tripler is classified as a public hospital which operates in a non-competitive environment similar to the National Health Systems of Great Britain and Canada. Marketing public health care systems is extremely important because it has a tremendous potential for changing or reinforcing existing behaviors and beliefs of consumers in a favorable manner. This is particularly important to public hospitals in a non-competitive environment in light of their missions and limited resources, especially at a time when so much emphasis is being placed on cost containment (Lovelock, 1984). The four phases of a marketing program are: (1) planning, (2) market plan, (3) implementation, and (4) results and evaluation (Dubuque, 1985).

Health care marketing has been growing at a tremendous rate. The total annual marketing budget for health care increased from \$200 million in 1984 to \$1.34 billion by 1988. Additionally, the salaries of marketing executives have increased significantly as have their level of education and experience (Steiber, 1988). The commercial business standard is to dedicate 5% of its revenue to marketing (Spears, 1987). The health care industry, although still well below this standard, has gone from .5% in 1984 to 2% in 1988 (Droste, 1988).

Hospitals operating in a non-competitive environment have been much slower than the rest of the health care industry to utilize marketing to its fullest potential. The thought process has been that because the hospitals have a captured audience whose demands are exceeding the amount of resources available and no new revenue is generated from increased workload, what is the benefit of marketing? Within recent years the non-competitive health systems have begun to realize that marketing offers many benefits besides increasing the number of revenue generating patients and as such, this growing awareness has resulted in increasing marketing activities in this environment. Marketing and market research can avoid wasting a great deal of resources by insuring they are not misdirected. The acceptance of marketing in a non-competitive environment was clearly

demonstrated in the 1986 Canadian Public Health Association annual convention. The central theme was health promotion. The fact that 200 papers presented at the convention had the word marketing in the titles would appear to be a strong endorsement of the benefits it can generate for health care systems (Ruderman, 1986). Health care marketing in non-competitive environments is a concept whose time has come.

BENEFITS

The benefits of effective marketing programs for hospitals operating in a non-competitive environment can be numerous and substantial. Many of the benefits have an overlapping effect due to the fact that they are closely interrelated. The biggest drawback of these benefits is that it is extremely difficult to quantifiably measure the extent of their success.

The first benefit of a marketing program is an improved image for the hospital. Public organizations tend to be more closely scrutinized and criticized than private organizations because they are supported with tax dollars (Lovelock, 1984). Consequently, non-competitive hospitals need to be pro-active by going to the consumers and informing them of the hospitals' positive qualities. If consumers have a positive image of a health care facility, then the affect of negative publicity will be minimized, especially in the long run.

The second benefit is increased patient satisfaction. One definition of patient satisfaction is the difference between the patient's expectations and the actual outcomes. Whenever possible, the patients should be the primary source of information when determining how best to allocate resources in order to increase satisfaction (Scrivens, 1987). Each dissatisfied patient is capable of generating as many as sixty-seven negative impressions due to the fact that each patient will tell eleven others about his/her negative experience and each of the eleven will relay the story to five more people (Keckley, 1988). Patient satisfaction and image are closely related. You cannot have one without the other.

The third benefit of a marketing program is an improved decision-making process. An effective marketing program involves scientific market research. This provides invaluable information upon which to make sound decisions in allocating resources in the most efficient and effective manner to meet the specific needs of the consumers (Dodson, 1988). Market research will be invaluable in the 1990s. Access to and control of information will be critical to an organization's success. Nice-to-know information will become have-to-know information in the near future (Keckley, 1988).

The fourth benefit of marketing is acquiring consumer

support for new policies and programs. In light of the present economic situation, hospitals in a non-competitive environment are expected to do more with less. In order to accomplish this, the limited resources must be used in such a manner as to best serve the needs of the population as a whole rather than the individual. This may involve terminating or severely limiting some services. These types of changes to the health care system have little chance of being successful without consumer support (Fontaine, 1988). This type of support can be achieved through marketing efforts by informing the public well in advance of making the actual changes and the reasons behind them.

The fifth benefit is increased political power. A hospital's political power increases as its positive image and degree of patient satisfaction increases. Corporate headquarters such as Health Services Command in the case of Tripler are much more likely to reward hospitals which have achieved an outstanding reputation among its beneficiaries with additional funding and reduced amount of supervision (Kolter, 1982). The additional funds and greater freedom of operation provides hospital administration with the flexibility to use creative and innovative ideas to increase efficiency and patient satisfaction. It also creates a more pleasant working environment for the staff (Lovelock, 1984).

Increased recruitment and retention of staff in all

positions, especially those where a critical shortage exists, is the sixth benefit of an effective marketing program in a non-competitive environment. A marketing program which identifies essential categories of vacancies and performs research to determine where the qualified applicants are most likely to come from, as well as what their greatest concerns are, is much more likely to develop and implement a successful recruitment and retention campaign. An effective marketing program avoids the waste of misdirected promotional activities (Ruderman, 1986). Additionally, a hospital which enjoys an excellent reputation within the community is much more likely to recruit and retain key staff personnel. Employees like to feel good about their organization (Kolter, 1982).

Increasing the overall health status of the consumer population is the seventh benefit of health service marketing. Social marketing in the health care industry is an attempt to favorably modify consumer behavior from a health standpoint by means of advertising and promotion. The kind of changes desired include such things as reducing cholesterol levels, controlling blood pressure, stop smoking, and regular exercise (Andreasen, 1988). An additional benefit of social marketing is a more favorable image of the hospital because it conveys the message, "We Care." Marketing can also increase the chances of more

favorable medical outcomes by increasing patient satisfaction. Satisfied patients tend to be in greater compliance with their recommended treatment and therefore recover from their illnesses at a much faster rate (Pascoe, 1983).

The eighth and final benefit of marketing by non-competitive hospitals is a decrease in the number of malpractice suits. Marketing improves a hospital's image and an individual considering a malpractice suit tends to think twice about filing if the institution has a favorable reputation (McDonald, 1989). Someone contemplating suing a hospital may elect not to do so if he/she feels his/her chances of winning are decreased because the hospital enjoys a positive image or due to peer pressure from co-workers, friends, and family who find it hard to believe that the hospital was in error since their care at this same hospital had been such positive ones.

PLANNING PHASE

As stated earlier, the four phases of a marketing program are: (1) planning, (2) market plan, (3) implementation, and (4) results and evaluation (Dubuque, 1985). The first step of the planning phase is to review the organization's strategic plan. Strategic planning is a commitment by management to study the future of markets to determine which services or products should be aggressively

supported, maintained, or abandoned and determine the direction of new service/product development. Strategic planning sets the direction for the marketing program (Luther, 1982). The most crucial aspect of a marketing program involves obtaining support from senior management from conception to completion. Without this support, the marketing program will most likely be unsuccessful due to a lack of resources such as money and personnel (Clarke, 1982).

The next step involves conducting internal and external assessments. Before an organization begins gathering new data to resolve a specific research problem, it needs to evaluate the data that already exists (Luther, 1982). Internal assessment involves evaluating the organization with respect to current services, facilities, equipment, human resources, historical utilization, financial performance, and promotional efforts. An external assessment deals with determining the primary target populations, demographic trends, and demand for services (Dubuque, 1985). This assessment information needs to be meshed with the strategic plan and guidance from senior management so that a market research instrument can be designed to determine specific data upon which to develop a beneficial market plan.

Kolter defines market research as "the systematic

design, collection, analysis, and reporting of data and findings relevant to a specific marketing situation or problem facing an organization" (Kolter, 1982). Reliable and valid market research requires skill and expertise in design, quantitative methods, sampling procedures, questionnaire construction, interview techniques, survey management, data processing, data analysis, and interpretation methods (Clarke, 1982).

In a health care environment, it can be very beneficial to involve physicians, nurses, and administrative personnel in the actual design and approval of the research instrument. This creates a sense of ownership which fosters their support when it comes time to implement the changes needed as determined by an analysis of the research data (Duffe, 1985).

The three basic methods of conducting surveys are: (1) personal interviews, (2) telephone interviews, and (3) mailed questionnaires. The positive aspects of personal interviews are that they allow for a more in depth collection of information and have higher completion rates. The negative aspects are high expense and interviewer bias. Telephone interviews on the other hand have a shorter completion time and lower costs on the positive side. On the negative side they allow fewer questions and no graphics. The pluses for mailed questionnaires include

anonymity and least cost, while the minuses include low return rates, poor sample representation, long collection time, and no opportunity to eliminate confusion.

Market research surveys require a great deal of skill. Unfortunately, senior management in many organizations take an over simplistic view of marketing surveys. They think of the survey as a few obvious questions that were answered by an adequate number of people from the population at large (Kolter, 1982). Scientific research involves numerous techniques and analyses to insure the data gathered is reliable and valid. Once the data is analyzed to determine which items are statistically significant, then corrective action can be designed and implemented. The next phase involves the market plan itself.

MARKET PLAN

A market plan is not just advertising and gimmicks. It is only of value if it is a means of assisting people to satisfy needs. Once consumers needs are identified the organization must design services that will meet these needs. Finally, the organization must communicate to the consumers that changes have been implemented to satisfy their needs (Nordstrom, 1987). The first step in developing a market plan is to determine its measurable objectives. Quantitative terminology is superior to qualitative in terms of measuring the level of success or

failure of a program (Luther, 1982). The next step is to determine the target audience.

Marketing programs which serve organizations the size of hospitals require the services of a professional advertising agency. The degree of their involvement varies with the size of the marketing budget. There is no foolproof method of selecting a good advertising agency. One technique is to analyze existing advertising and contact the agencies responsible for the types of advertisement that the organization is impressed with. Another technique is to query local medias such as newspapers and television. Advertising agencies which make life easier for the media are probably good at what they do and will be the ones that the media will recommend (Luther, 1982).

The key element of an effective market plan is the selection of technique(s) used to promote, advertise, and educate. The overall goal of the plan is to get the consumers to support the organization to a greater extent than in the past. The creative strategy is the most important aspect of a market plan because it must achieve the desired objectives and not just merely entertain the consumers. Selection of marketing technique(s) involves selection of the target population; positioning; copy platform; and tone and execution. The goal of the technique(s) is to reach the maximum number of people in the

target audience in the most efficient and effective manner given the constraints of the marketing budget (Luther, 1982). Creativity must be encouraged and nurtured throughout the entire process of developing a market plan. Original, innovative, and exciting ideas are much more effective than imitation (Schulman, 1987). The communication portion of a market plan can be broken down into four broad categories: (1) personal selling, (2) media advertising, (3) publicity and public relations, and (4) promotional or informational activities (Lovelock, 1984). A market plan must be dominant, strong, decisive, dogged, consistent, and relentless. This cannot be achieved if the marketing process becomes bogged down in bureaucracy such as the formulation of numerous decision making committees.

Before any funds are committed to the market plan, it needs to be formally presented to senior management and obtain their approval. The formal presentation should be structured to the level of expertise of the audience and acquire their interest. Additionally, the presentation should be specific, display data in visual form, and address the issues of reliability and validity (Lovelock, 1984).

IMPLEMENTATION

Implementation is the most difficult and time-consuming phase of a market program. A successful implementation phase is dependent upon adequate funding to insure all

required resources such as money, personnel, and time are available to carry out the long-term market plan to the level and degree specified (Lovelock, 1984). There are four methods for determining a proposed marketing budget. The Affordable Method is based on what the organization feels it can afford. Its weakness is that it is difficult to achieve long-term results because the budget varies from year to year. The Competitive-Based Method and the Percentage-of-Sales Method are not options for non-competitive hospitals since by the very nature of their name they do not compete with other hospitals and because they practice socialized medicine which does not generate revenue from patients. The last and most desirable method is the Objective and Task Method. This method consists of identifying the tasks necessary to accomplish specific marketing objectives and then estimates the cost of implementing these tasks (Kolter, 1982).

A key element of implementation is pre-testing all creative concepts before major expenditures are committed. Proto-types of all communications media such as posters, brochures, and newspaper ads should be tested on a small but representative sample of the target population. Based on their feedback, modifications should be made as appropriate before beginning mass production of the media campaign. This risk-reduction measure can help prevent an organization

from possibly wasting thousands of dollars on the production and placement of an unsuccessful media campaign (McDonald, 1989).

Other critical elements involve the development of a realistic timetable and a great deal of coordination (Lenneville, 1982). This consists of a detailed list of tasks for each objective and assigning responsibility by name to each task. Additionally, each task should be accompanied with a description of expected outcomes (Lovelock, 1934).

RESULTS AND EVALUATION

A marketing program must be monitored on a continuous basis. Feedback is essential in determining whether or not the objectives of the market plan have been achieved and to what degree. This information can be used to modify the market plan as necessary in order to achieve the desired results (Lenneville, 1982). Short-term feedback acts as an early warning system to identify minor and sometimes major problems that can be fixed fairly quickly resulting in greater consumer satisfaction. It can prevent funds from being wasted on ineffective promotional material and advertising. An example of short-term feedback is a limited telephonic survey of the target population following a direct mail campaign. The survey would ask questions such as: (1) Did you receive a brochure?, (2) Did you take time

to read the brochure?, and (3) What could be done to improve the brochure? Long-term feedback involves such things as customer satisfaction surveys every six months following the implementation of the market plan. This allows sufficient time for a large portion of the target population to be exposed to the market plan so that the true effect can be measured over an extended period of time (Keckley, 1988). As long as a market plan exists, it must be periodically evaluated and modified as appropriate.

Non-competitive hospitals are primarily concerned with image marketing. Measuring the subtle effects of promotional, public relations, and advertising efforts from a quantifiable standpoint is extremely difficult. These organizations must rely primarily on qualitative input such as patient satisfaction surveys conducted on a periodic basis. The purpose of these surveys is to determine whether the target population is aware of the marketing efforts, do they understand them, and do they feel the efforts are worthwhile (Luther, 1982).

CHAPTER III.

CURRENT STUDY

OBJECTIVES

The purpose of this Graduate Management Project is to develop the framework for an effective marketing program that will increase the level of satisfaction with respect to outpatient care received by eligible beneficiaries at Tripler Army Medical Center. In order to accomplish this goal, the following must be achieved:

(1) Perform a literature review to determine the necessary elements for developing a marketing program in health care facilities. Emphasis will be placed on the information pertaining to hospitals operating in a non-competitive environment and the potential benefits of an effective marketing program.

(2) Review the missions and goals of Tripler with respect to outpatient care to determine how a marketing program can support achieving these goals and objectives.

(3) Develop a valid and reliable research survey instrument which will measure the degree of dissatisfaction, real and perceived, with outpatient care provided by Tripler to eligible beneficiaries.

(4) Survey a representative sample of eligible beneficiaries using an acceptable sample size.

(5) Perform statistical analysis on the survey results to determine the most significant areas of outpatient dissatisfaction.

(6) Provide a wide range of marketing ideas to support a market plan that will increase patient satisfaction with outpatient care at Tripler and favorably change negative perceptions which are unfounded.

(7) Outline an implementation plan for an outpatient marketing program at Tripler.

(8) Outline a plan for evaluating the results of the marketing program.

(9) Present the initial framework of a marketing program for outpatient care to the Commanding General of Tripler.

CRITERIA

Obtain approval for the outpatient marketing program from the Commanding General of Tripler Army Medical Center. The approval must be accompanied by a commitment of the necessary resources (funding, personnel, and space) to support such a program over the long-term of at least two or three years.

ASSUMPTIONS

Increasing patient satisfaction with outpatient care will be extremely beneficial to all parties concerned, eligible beneficiaries and the entire organization of Tripler Army Medical Center. Additionally, negative perceptions of outpatient care at Tripler exist which are unfounded. An effective marketing program could

significantly reduce these negative perceptions, thereby increasing patient satisfaction.

LIMITATIONS

The research instrument used in developing the marketing program is an outpatient survey which was designed to be used only in military hospitals.

METHODS AND PROCEDURES

The purpose of the Graduate Management Project is to develop the framework for an effective marketing program that will increase the level of satisfaction with respect to outpatient care received by eligible beneficiaries at Tripler Army Medical Center. Marketing research is the systematic design, collection, analysis, and reporting of data on findings relevant to a specific marketing situation or problem facing an organization (Kolter, 1982). The research instrument utilized to identify areas of significant dissatisfaction was the Patient Opinion Survey (Appendix A). The methods and procedures portion of this project will address the following areas:: (1) development of the survey, (2) implementation of the survey, and (3) analysis of the survey results.

Survey Development

The development of a valid and reliable Patient Opinion Survey began with an extensive review of the literature. In addition to the sample surveys found in the literature,

numerous patient satisfaction surveys were collected from the various civilian hospitals on Oahu. Utilizing existing surveys which have proven to be successful research instruments increases face validity.

The survey was designed to measure outpatient satisfaction within four domains: (1) physician competency, (2) staff courtesy, (3) amenities, and (4) education. Physician competency questions deal with patient perceptions of the ability of military physicians as compared to physicians in the civilian sector. The staff courtesy domain measures patient satisfaction by the level of courtesy extended to them by clinicians and administrative personnel. Amenities domain addresses numerous areas not directly related to actual medical care provided such as availability of parking and waiting times. The final domain of education is concerned with measuring how well Tripler does at educating its beneficiaries on how to access the medical system, services available, and the availability of information on key current medical issues such as how to prevent high cholesterol.

Once the four domains were established, the next step involved brainstorming for potential survey questions. This involved comprising an extensive list of questions for each domain from all sources without evaluating them on their individual merits. Next, the list was reviewed in detail

keeping only the best questions for each domain (Burns, 1985). The total number of close-ended, open-ended, and demographic questions was limited to forty questions in order to insure that the survey would not take more than fifteen minutes to complete.

Careful consideration was given to the exact wording of each question. Emphasis was placed on using simple words and avoiding ambiguous words such as usually and frequently. Additionally, every effort was made to avoid technical terminology, double barreled questions, and leading questions. A double barreled question addresses two separate ideas in the same question such as, the staff is friendly and competent. The respondent may feel the staff is friendly but incompetent and consequently does not know how to answer the question. A leading question might begin with the words, "don't you agree that" (Lovelock, 1984).

There is a tendency on the part of respondents to establish a set pattern of answers in satisfaction surveys. If they basically feel satisfied with the service being surveyed and the first few answers that support this belief are high numbers on a Likert scale, then the tendency is to answer all the questions with high numbers and not read the questions carefully. In order to prevent this, the questions were randomly worded in a negative and positive configuration (Taylor, 1981). To avoid a set pattern of

answers within each domain, the close-ended questions from all four domains were randomly mixed together. In order to test for reliability, the same question on patient parking from the amenities domain was asked twice, only one time it was worded positively and the next time negatively. If the answers are consistent then it is an indication of reliability.

A five-point Likert scale was used for the twenty-nine close-ended questions. This type of scale allows respondents sufficient responses to accurately reflect their attitudes. Additionally, this scale is easy to use, score, and analyze. Although a seven-point or nine-point Likert scale provide for a more precise measurement they were not used because they can be confusing to the respondents (Duffe, 1985). The answers associated with the five-point Likert scale are as follows: (1) 5 - strongly agree, (2) 4 - agree, (3) 3 - neutral, (4) 2 - disagree, and (5) 1 - strongly disagree.

The open-ended portion of the survey consisted of five questions. The first question in this section asks, "What two things should be improved in order to increase your level of satisfaction with outpatient care?" The purpose of this question was two-fold. First, the answers will be used to re-validate the areas of greatest dissatisfaction found in the close-ended questions for each domain. Secondly,

this question will identify possible areas of dissatisfaction that were not covered in this survey. These new areas, if significant, could then be incorporated into future patient satisfaction surveys. The other open-ended questions were designed to capture useful information in developing a marketing plan should certain items in the survey prove to be significant in terms of identifying patient dissatisfaction.

The demographics section of the survey consisted of six questions covering the following information: (1) status, (2) rank, (3) age, (4) sex, (5) branch of service, and (6) clinic. Branch of service was included because Tripler is truly a tri-service hospital. Tripler is the only military hospital in the State of Hawaii and therefore abides by the rule of thirds. One-third of Tripler's beneficiaries are Army, one-third Navy, and the final one-third consists of the Marines, Air Force, and Coast Guard (Table 1).

Service	Active Duty	Family
Army	21,284	25,221
Navy	24,374	20,522
Marines	9,263	8,029
Air Force	6,119	9,201
Coast Guard	1,500	3,000
Total	62,540	65,973

Table 1. Population by Service

Demographic data was placed at the end of the survey because the questions tend to be less interesting and personal in nature (Kolter, 1982). Once the respondents have invested their time and effort answering the questions concerning the key issues, they will be more likely to take the additional time to complete the entire survey, to include the demographic questions.

Every effort was made to make the survey look as professional as possible. If respondents feel that a great deal of time and effort went into preparing the survey, they are more likely to believe that the survey is important. Consequently, they are much more likely to take the survey seriously believing their input could have an impact on improving outpatient care at Tripler. The original survey was professionally prepared using an IBM Desktop Publisher computer. Copies from the original survey were professionally reproduced on an off-set printer. Tripler is

affectionately known as the "Pink Lady" because the entire medical center is painted pink. Consequently, the survey was printed on pink colored paper so as to imply that this survey was truly important and not some mandated, bureaucratic requirement that Tripler was forced to comply with. The cover sheet consisted of a picture of Tripler and some short comments. These comments consisted of a brief statement of the purpose of the survey, a request for honest responses, and a thank you for the respondents' time and effort. Additionally, the comments assured the respondents that their answers would be kept strictly confidential. All instructions for completing the survey were short, precise, and printed in bold type.

Before the final Patient Opinion Survey was reproduced for implementation, the survey was reviewed by clinicians, beneficiaries, and an expert in the area of developing surveys. Their purpose was to identify any errors which could range from spelling, grammar, and general understanding of the questions and instructions to the technical aspects of properly wording the questions, format, and sequencing of questions. These reviews were performed in order to increase face validity. Once appropriate modifications were completed, the survey was professionally reproduced and ready for implementation.

Implementation of the Survey

The Patient Opinion Survey was implemented by two Red Cross volunteers. Each volunteer surveyed twenty-five beneficiaries from eight of the busiest outpatient clinics at Tripler. The sample size of fifty was determined to be acceptable due to the fact that special care was taken to insure that the sample population was representative of the outpatient beneficiary population. According to the Medical Summary Report (MED 302), the percentage of actual outpatient visits broken down by each status is shown in Table 2.

Status	Percent
Dependent of Active Duty	44%
Active Duty	34%
Retired	9%
Dependent of Retired	8%
Veterans	3%
Other	3%
Total	100%

Table 2. Outpatient Visits by Status

Since the categories of "veterans" and "other" accounted for such small percentages of outpatient visits and the sample size was only fifty, they were not included in the sample population. The final percentages of individuals

surveyed are listed in Table 3.

Status	Percent
Dependent of Active Duty	47%
Active Duty	36%
Retired	10%
Dependent of Retired	8%
Total	100%

Table 3. Surveyed Population of Status.

The actual number of beneficiaries surveyed in each status was based on these percentages. Additionally, these fifty surveys were divided as equally as possible among eight of the busiest outpatient clinics. The final breakdown of the fifty surveys by status and clinic is listed in Table 4. The more representative the sample population is of the overall population, the higher the degree of content validity (Rochleleau, 1980).

Clinic	AD	DEP AD	RET	DEP RET
Internal Medicine	3	2	1	1
Orthopedics	3	3	1	0
Adult Outpatient	3	3	1	1
General Surgery	2	3	1	0
OB/GYN	3	4	0	0
Emergency Room	2	3	0	1
Pediatrics	0	3	0	0
Cardiology	2	2	1	1

Table 4. Distribution of Surveys by Clinic and Status.

Both of the Red Cross volunteers were briefed in detail on how to implement the survey and they were provided with a written set of instructions (Appendix B). Two surveyors were used in order to test for reliability. If there are no significant differences between the results of the two surveyors by means of computing Pearson's r than reliability will be achieved (Stamps, 1981). Red Cross volunteers were intentionally used to implement the survey because it was believed that individuals would be less likely to say no to Red Cross volunteers when asked to participate in the survey, thus achieving a more representative sample population. Additionally, Red Cross volunteers are more likely to instill in the respondents a sense of trust that their answers will be kept confidential. This in turn should result in more honest answers on the part of the

respondents. For these reasons the volunteers were asked to wear their Red Cross uniforms. Randomization in selecting individuals for the representative sample was achieved by the fact that the volunteers completed the surveys in multiple clinics over a period of several days as time permitted without any regard for a particular time of day.

Each of the fifty respondents had to meet two criteria. First, they had to fill one of the quotas outlined in Table 4. Secondly, they had to have just completed an outpatient visit in which they were treated by a physician. The latter stipulation exists because many of the survey questions are related to physicians. All respondents were asked to complete their survey immediately following the clinic visit. The sooner the surveys are completed after an outpatient visit the more likely the data will be in accurately measuring satisfaction because the level of recall of events will be at its highest level (Keckley, 1988).

The three basic methods of conducting a survey are personal interviews, mailed questionnaires, and telephonic interviews. The technique used in this study is a modified personal interview. The surveyors randomly asked patients completing a clinic visit the necessary questions to determine if they meet the criteria to be surveyed. If they did, the volunteers then asked the individuals to complete

the survey and turn it in to them before leaving the clinic. Additionally, the volunteers explained the purpose of the survey and emphasized that the survey was strictly confidential and anonymous. Many benefits were derived from this technique. This process allowed for a higher response rate, shorter completion time, lower implementation costs, and increased likelihood of obtaining a representative sample. This technique also provided instant feedback as to the length of time to complete the survey, as well as whether the questions and directions were clearly stated and easily understood. The final benefit of this survey method involved a more thorough completion of the the survey by the respondents, especially on the open-ended questions. The volunteers screened all surveys for completion before the respondents left the clinics. Many individuals are willing to answer questions where they just have to circle an answer such as on a Likert scale but are hesitant to answer an open-ended question because it requires too much effort to think of a response and/or they are uncomfortable with their writing skills. So rather than enduring this unpleasant task, the respondents often times simply chose to leave the questions blank. However, a personal surveyor can increase this response rate by asking the respondents to verbalize their answers to open-ended questions and write in their responses for them.

Analysis of Survey Results

Statistical Analysis System software, Version 6.03, was used to perform the statistical analysis on the data from the Patient Opinion Survey. The first step involved coding all the close-ended questions so that all answers which indicated satisfaction with outpatient care at Tripler were represented by a 4 or 5 on the five-point Likert scale. Prior to consolidating the data from all the surveys, the results of each surveyor were entered separately and a Pearson's r was calculated to determine if the mean scores of each surveyor differed significantly. The more similar the scores are between the two surveyors then the higher the reliability. Once this was accomplished, all survey scores were combined and multiple regression analysis was performed.

Multiple regression analysis is a multi-variable statistical analysis that allows a user to determine the relative importance of a group of factors in predicting a particular outcome which in this study is patient dissatisfaction (Keckley, 1988). Multiple regression analysis was run using a full model where patient dissatisfaction was the dependent variable and the four domains (physician competency, courtesy, amenities, and education) were the independent variables. Restricted models were run where each domain was dropped from the model

on an alternating basis in order to determine which domains demonstrated the strongest relationships to overall patient dissatisfaction. Additionally, multiple regression analysis was performed separately on each domain to determine which factors in each domain carried the greatest weight.

Descriptive statistics were computed to include the means and standard deviations for all factors in the four domains. This was done to assist in identifying and prioritizing those areas which were significant in determining beneficiary satisfaction with respect to outpatient care.

Cronback Alpha level was computed for the full model using randomized block analysis of variance technique in order to assess the reliability of the survey instrument. Descriptive statistics to include the means and standard deviations were computed on the demographic information. Additionally, one-way analysis of variance was performed in order to determine if status, rank, age, sex, branch of service, or clinic were significantly related to patient satisfaction. Areas of significance could prove helpful in narrowly defining a target population for the market plan.

CHAPTER IV.
RESULTS AND DISCUSSIONS

OVERALL RESULTS

This section will discuss the overall results of the Patient Opinion Survey which was designed to measure patient satisfaction with outpatient care at Tripler. A more detailed analysis of the data will be addressed in the sections titled: (1) physician competency, (2) amenities, (3) courtesy and (4) education. Additionally, the sections on each domain will discuss general marketing ideas which address those factors which are the strongest predictors of patient dissatisfaction.

Multiple regression analysis was performed on all four domains with the full model representing the overall measure of patient satisfaction. The results are listed in Table 5.

Effect Tested	R Sqd	F Ratio	df1	df2
Full Model (Satisfaction)	.4936	10.48 ***	4	43
Physician Competency	.2275	3.16 *	1	43
Amenities	.1710	8.46 ***	1	43
Courtesy	.1450	10.66 ***	1	43
Education	.2682	0.20 *	1	43

Notes: 1. * = N/S 2. ** = $p < .05$ 3. *** = $p < .01$
 Table 5. Multiple Regression Analysis of the Full Model

An R squared value of .4936 for the full model indicates that the four domains account for 49% of the factors associated with measuring patient satisfaction. This is a

relatively high value given the fact that this type of social science survey is measuring a very broad and subjective area called satisfaction. The statistical significance of this data is supported by a F ratio of 10.48 at $p < .01$. The courtesy domain had a F ratio of 10.66 at $p < .01$. This is significant in that of all the domains, patients most closely associate staff courtesy with overall satisfaction. The only other domain which proved to be statistically significant was the amenities domain with a F ratio of 8.46 at $p < .01$.

The mean scores for each domain and the factors within the domains were determined by the five-point Likert scale: (1) 5 - very satisfied, (2) 4 - satisfied, (3) 3 - neutral, (4) 2 - dissatisfied, and (5) 1 - very dissatisfied. The literature readily supports the fact that patients tend to favorably inflate their responses when rating physicians, other clinicians, and medical treatment facilities (Pelletier, 1985). Part of this is related to a reactivity factor where respondents favorably inflate their ratings because they are concerned over who will read the survey results and what affect it will have on their future care (Lebow, 1982). Consequently, for purposes of this survey a neutral response of 3 will be treated as an indicator of dissatisfaction. Mean scores therefore should be interpreted according to the following scale:

(1) $1.0 \leq \bar{x} \leq 3.0$, dissatisfied, (2) $3.0 < \bar{x} < 3.5$, gray area/cause for possible concern, and (3) $3.5 \leq \bar{x} \leq 5.0$, satisfied.

Question 23, "Overall, I am satisfied with outpatient care at Tripler", acted as the dependent variable in the full model for patient satisfaction. The mean score for this question was 3.875 which clearly indicates that overall, Tripler's beneficiaries are satisfied with outpatient care. Table 6 provides the mean scores for the full model and each domain. Patients are by far the most pleased with the courteous manner in which they are treated by the staff. On the other hand, patients are the least satisfied with physician competency based on their perceptions that physicians in the civilian sector are better qualified than military physicians. The mean score for amenities (3.184) is fairly close to physician competency (2.980). Given this and the fact that amenities domain has proven to be statistically significant with respect to what patients most closely relate to when evaluating satisfaction, the first priority for a marketing plan should be to address the amenities factors.

Dissatisfaction Ranking	Domain/Full Model	Mean Score	Standard Deviation
1	Physician Competency	2.980	0.968
2	Amenities	3.184	1.054
3	Education	3.340	1.022
4	Full Model (Satisfaction)	3.860	0.756
5	Courtesy	4.300	0.505

Table 6. Mean Scores of the Domains

Table 7 lists the top ten factors, irrespective of their domains, whose mean scores indicate the highest level of patient dissatisfaction. The amenities domain dominated the top ten list with five factors. Lack of sufficient patient parking was by far the second greatest contributor to dissatisfaction. Other areas within this domain include a lack of short-term day care facilities, excessive waiting times in the clinics, and poor television reception in the waiting areas. The education domain accounted for the next largest share of factors in the top ten list. The number one dissatisfier was the lack of a 24-hour hotline service staffed by registered nurses where patients could receive medical advice without having to come to Tripler and waiting to be seen in the Adult Outpatient Clinic or the Emergency Room. Other areas involved an inadequate understanding of CHAMPUS Prime/Extra and the correct procedures for making

appointments at the numerous specialty clinics. Additionally, respondents felt that Tripler should be more active in going out to the various military communities in an effort to educate the beneficiaries on the critical health risk factors such as how to prevent/control high cholesterol and hypertension. The third and last domain to achieve notoriety on the top ten list was physician competency. As stated earlier, physician competency is a measure of patients' perceptions as to how military physicians compare to physicians in the civilian community with respect to ability. According to this survey, military physicians are viewed as being less competent than their civilian counterparts. None of the factors from the courtesy domain were listed in the top ten areas of greatest beneficiary dissatisfaction. In fact, three of the courtesy factors are listed in the top five factors for the highest level of patient satisfaction. The entire list of factors have been rank ordered from least satisfied to most satisfied by their mean scores in Appendix C.

Dissatisfaction Ranking	Survey Question No.	Domain	Factor Description	Mean Score	Std Dev
1	14	Education	24-Hour Hot Line	1.700	0.516
2	3	Amenities	Parking	1.960	1.309
3	22	Amenities	Day Care	2.355	1.142
4	28	Education	Champus Prime/Extra	2.905	1.376
5	6	Amenities	Clinic Waiting Time	3.000	1.340
6	2	Education	Appointment Information	3.062	1.265
7	8	Amenities	T.V. Reception	3.102	1.159
8	26	Physician	National Test Scores	3.104	0.515
9	9	Education	Health Fairs	3.122	0.857
10	19	Physician	Specialty Training	3.167	0.630

Table 7. Top Ten Dissatisfiers by Mean Scores.

Table 8 contains the results of the one-way analysis of variance performed on the following demographic items:

(1) status, (2) rank, (3) age, (4) sex, (5) branch of service, and (6) clinic. The computations showed that no statistically significant differences in the overall level of satisfaction could be associated with any of the demographic characteristics.

Demographics	R Sqd	F Ratio	df1	df2
Status	0.1048	1.80 *	3	46
Rank	0.0060	0.09 *	5	40
Age	0.1391	1.45 *	4	36
Sex	0.0019	0.09 *	1	48
Branch of Service	0.0421	0.67 *	3	46
Clinic	0.0491	0.31 *	7	42

Notes: 1. * = N/S 2. ** = $p < .05$ 3. *** = $p < .01$
Table 8. ANOVA of the Demographics.

Demographic variables seldom demonstrate strong relationships in satisfaction surveys (Roghman, 1979; Rochleleau, 1980). The demographic data, although interesting, does not narrow down the target population for a marketing program at Tripler. Table 9 provides a more detailed description of the number of respondents to each category within each demographic characteristic.

Demographic Characteristic	Number of Respondents	Percent
1. Status:		
* Active Duty	13	36.0
* Dependent of Active Duty	23	46.0
* Retired	6	12.0
* Dependent of Retired	9	6.0
* Other	0	0.0
2. Rank:		
* E1 - E4	7	15.5
* E5 - E6	21	46.7
* E7 - E9	7	15.5
* W01 - 03	5	11.1
* 04 - 06	5	11.1
3. Age:		
* 18-25	9	22.0
* 26-30	11	26.8
* 31-35	10	24.4
* 36-40	5	12.2
* 41-65	4	9.8
* 65-75	2	4.9
4. Sex:		
* Male	20	40.0
* Female	30	60.0
5. Branch of Service:		
* Army	17	34.0
* Navy	20	40.0
* Marine Corps	5	10.0
* Air Force	8	16.0
* Coast Guard	0	0.0
* Other	0	0.0
6. Clinic:		
* Internal Medicine	8	16.0
* General Surgery	6	12.0
* Obstetrics/Gynecology	7	14.0
* Orthopedics	7	14.0
* Adult Outpatient	6	12.0
* Pediatrics	3	6.0
* Cardiology	6	12.0
* Emergency Room	7	14.0

Table 9. Demographic Data

The Patient Opinion Survey proved to be highly reliable as evidenced by two different statistical analyses. First, a Cronbach's Alpha of 0.839 was achieved when analyzing all items of the survey. Second, the Balanced Repeated Replication (BRR) method was applied to the survey data which resulted in a Pearson Correlation Coefficient of 0.856. The BBR was used because the survey was equally administered by two Red Cross volunteers. This resulted in two samples from the original sampled population, which in affect resulted in a replication of the administration of the survey. Consequently, the survey mimics a test-retest situation where the reliability coefficient can be obtained from a single administration of the survey (Les, 1989).

Validity of the survey data was established by an R squared value of .4936 as determined by a multiple regression analysis of the full model. This means that 49.36% of the variables comprising patient satisfaction with outpatient care are contained in the survey. Concurrent validity was achieved by two methods. First, the survey was modeled after sample surveys which had previously been proven to be valid and reliable. Second, a subject matter expert in designing valid and reliable surveys was consulted with throughout the survey design process. Face validity was achieved by soliciting feedback from clinicians and non-clinicians as to the content of the survey.

Modifications based on the feedback were incorporated into the survey prior to its implementation.

Additionally, every effort was taken to diminish the negative affect of reactivity on the validity of the survey. As stated earlier, reactivity might skew the data of the patients because they fear repercussions by the staff in future care if they were to respond negatively. The respondents were verbally informed by the surveyors that their answers were strictly confidential and this information was repeated in writing on the cover sheet. The cover sheet also explained that the purpose of the survey was to identify ways to better serve the beneficiaries of Tripler. Finally, the survey was initiated by Red Cross volunteers in uniform rather than clinic staff or personnel in military uniforms. This was intentionally done in order to increase the amount of trust on the part of the respondents that their answers would not result in negative feelings towards them by the clinic staff because the volunteers would respect the respondents rights to confidentiality and anonymity. As a result of these preventive measures, the benefit of obtaining input based on total recall of the respondents' experiences due to the fact that they had just completed a doctor's appointment far outweighed any effect of possible skewed data from reactivity.

Several other factors not directly related to reliability and validity, but still important to a well executed survey, were achieved. The surveyed population was extremely representative of the various statuses of beneficiaries treated at Tripler in an outpatient setting. This was explained in detail in the methods and procedures section. In order to maintain the respondents attention during the course of the survey, the research instrument was designed not to take longer than 15 minutes. In actuality, the average survey took less than 10 minutes to complete. A high completion rate was achieved as evidenced by the fact that all patients requested to complete the survey did so with only one person not completing the entire survey. The incomplete survey was substituted with one completed by another patient who fit the same status and clinic criteria. A strong indicator that the respondents took the survey seriously was evidenced by the fact that 72% of the respondents took the time to write out responses to the open-ended question which asked, "What two things should be improved in order to increase your level of satisfaction with outpatient care?" The survey can be said to be very readable with easy to understand directions as evidenced by the fact that no respondents requested clarification of any aspect of the survey from the Red Cross volunteers.

Several weaknesses of the survey were identified and

corrective measures should be incorporated before conducting the study again. The wording could be improved in some questions. In order to determine whether the respondents were closely reading each question, a question on parking was asked twice, one positively and one negatively.

Pearson's r of .652 was only slightly significant in showing consistency in responses to both questions. This can be attributed to the fact that one question simply stated patient parking while the other question referred to "convenient" patient parking. The simple injection of the word convenient is enough to change the context of the question resulting in a difference in responses.

Additionally, careful wording of questions must be done to avoid leading questions such as question number six which stated, "The doctor appeared to be in a hurry to complete my visit and did not spend enough time answering my questions." The part about the doctor being in a hurry should be eliminated.

Another weakness of the survey can be attributed to the fact that only 30% rather than 50% of the questions were negatively worded. Question 34 which stated, "Additional Comments:," should be eliminated for being redundant. Question 30 which asks the respondents to write out suggestions for improvements is sufficient alone. This is clearly evident by the fact that 72% of the respondents

answered question 30 while only 14% responded to question 34. Additionally, those who did answer question 34, had responses which actually belonged in question 30.

Finally, the area requiring the greatest amount of improvement is the education domain. When multiple regression analysis was performed on just the education domain, the full model had an R squared value of 0.1949. This indicates that the factors account for only 19.49% of the areas comprising education. This percentage is very low. This can be attributed to the fact that the questions in this domain covered a wide range of topics from establishing a 24-hour registered nurse hotline to conducting health fairs in the military communities. The education domain should most likely be split into two domains with questions being designed to be more specific to the newly established domains.

PHYSICIAN COMPETENCY DOMAIN

The domain of physician competency is designed to measure how the beneficiaries compare military doctors to their civilian counterparts with respect to ability. The questions comprising this domain are listed below and the numbers represent the question numbers on the actual Patient Opinion Survey (Appendix A):

11. In general, doctors in the civilian community are better than military doctors.

4. In general, doctors in the civilian community received better grades in medical school than doctors in the military.

19. In general, doctors trained to be specialists (examples: cardiologists, orthopedic surgeons...) receive better training in military hospitals than in civilian hospitals.

26. In national tests conducted to determine the technical expertise of doctors, military doctors receive higher scores than doctors in the civilian community.

Table 10 shows the results of multiple regression analysis of the domain where questions 4, 19, and 26 (independent variables) are regressed against question 11 (dependent variable). The full model has an R squared value of 0.4703 and a F ratio of 12.73 at $p < .01$. This is statistically significant in that 47.03% of the variables accounting for physician competency are found in this domain. Within the domain, only the factor which addresses medical school is determined to be significantly associated with how patients view physician competency. This may be attributed in part to the fact that many of the respondents do not clearly understand the concepts of national tests and specialty training even though this wording was carefully chosen to avoid technical terminology such as Residency Training Programs and Board Certification.

Effect Tested	R Sqd	F Ratio	df1	df2
11. Full Model (Physician)	0.4703	12.73***	3	43
4. Medical School	0.0396	18.89***	1	43
19. Specialty Training	0.2381	2.78*	1	43
26. National Tests	0.2670	0.43*	1	43

Notes: 1. * = N/S 2. ** = $p < .05$ 3. *** = $p < .01$
 Table 10. Regression Analysis of Physician Competency.

The three factors comprising the domain are rank ordered in Table 11 by their mean survey scores in terms of greatest dissatisfaction. As stated earlier, the mean scores will be interpreted as follows: (1) $1.0 \leq \bar{X} \leq 3.0$, dissatisfied, (2) $3.0 < \bar{X} < 3.5$, gray area/cause for possible concern, and (3) $3.5 \leq \bar{X} \leq 5.0$, satisfied.

Dissatisfaction Ranking	Survey Ranking	Factor	Mean Score	Standard Deviation
1	8	National Tests	3.104	0.515
2	10	Specialty Training	3.167	0.630
3	13	Medical School	3.286	1.021

Table 11. Mean Scores for Physician Competency.

Improving patient satisfaction with outpatient care by means of improving the competency image of military physicians should be a key component, although not the top priority, of Tripler's marketing program. The fact that

physician competency had the mean score representing the highest level of dissatisfaction of all four domains (Table 5) and that two of its three factors had mean values on the list of the top ten dissatisfiers is grounds for making this domain an essential part of marketing efforts. However, since the domain failed to demonstrate statistical significance in its association with overall patient satisfaction (Table 5) it should not be given the highest priority.

The two means of improving the competency image of military physicians involve a direct mail brochure campaign and a poster campaign. Both methods will require the services of a professional advertising agency in designing the poster and brochure along with the actual copy (written message). The campaigns should focus on the medical school aspect. This emphasis is due to the fact that its mean value was fairly close to mean values for the factors of national test scores and specialty training, as well as the fact that it has been statistically proven that patients more closely associate physician competency with their performance in medical school.

The goal of marketing is to demonstrate the benefits of a service or product. The brochure and/or poster campaign must educate Tripler's beneficiaries to the fact that the quality of medicine practiced by military physicians is

better than that of physicians of the civilian sector. In conveying this message the marketing campaign must take advantage of the following facts:

(1) Approximately 80% of Tripler's physicians received their medical school training under the Health Professional Scholarship Program (HPSP).

(2) The average Medical College Admission Test score of HPSP students is 9.5 while the national average is only 7.5.

(3) HPSP applicants must have already been accepted by a civilian medical school before they can apply for HPSP and only 1 out of 3 applications is approved.

(4) The majority of HPSP physicians graduate in the top third of their class.

(5) The second largest source of Army physicians is from the Uniformed Services Health Sciences University (USHSU). Since students attending this medical school are on full scholarship, as well as receiving full pay and benefits as a second lieutenant, USHU receives more applicants per vacancy than most civilian medical schools.

(6) More than 80% of Tripler's new active duty physicians graduate in the top half of their medical school class.

(7) Approximately, 96% of Tripler's resident physicians pass their boards the first time as compared with

the civilian rate of only 64%.

The facts listed above were obtained from Colonel Norman W. Ream, Medical Corps, Consultant to the Army Surgeon General on Academic Affairs, and from a Special Issue of the HSC Mercury (Ream, 1990; Staff, 1988). A marketing campaign that can communicate the facts stated above in a manner which is succinct, direct, and eye-catching will be very successful in changing the perception of military physicians from being viewed as second rate to that of "the best and the brightest."

In order to achieve this, the brochure and/or poster need to be professionally produced. The material must be dynamic and interesting enough to break through the cluttered marketing environment in which each person is exposed to 1,700 advertising messages each day (McDonald, 1989). The promotion material should have pictures and be in color to increase readership. A high quality product is doubly important in that the public tends to equate a professional ad with a professional medical center (Roberts, 1989). An example of a professional brochure in terms of pictures, color, and message format is enclosed in Appendix D; however, for purposes of direct mail the brochure should be folded in three sections so that it is letter size. The key element in direct mail is to get the receivers attention so that they will open up the "junk"

mail. Hopefully, once it is opened, something will catch the readers' eyes so they will actually take the time to read the message. The best way to get the beneficiaries attention is to offer them the possibility of winning something of value. This possibility should be clearly marked in a bright color on the outside of the brochure so that the readers cannot miss it. One item of value that Tripler could easily offer is a VIP appointment with the physician of his/her choice at a day and time that is convenient to the winner. The winning beneficiaries would set up their appointments with the Commanding General's secretary. On the day of the appointments, the individuals would arrive at Tripler's Headquarters where the individuals would be offered refreshments and a brief office call with the Commanding General prior to being escorted directly to their requested physicians' offices. The winners would also have the choice of using the prize for themselves or giving it to another family member or friend, as long as they were eligible for care at Tripler. The winning brochures could be identified on the inside with a raised gold seal with Tripler's emblem. Preliminary inquiry with the Judge Advocate Office concerning the VIP appointments resulted in approval from a legal standpoint.

If Tripler were to mail a brochure to all 62,000 active duty service members and 12,000 retirees it would mean that

the campaign will have reached the homes of 97% of the eligible military beneficiaries in Hawaii. A professional advertising agency could accomplish this marketing effort for approximately \$70,000. Should Tripler choose to provide the majority of labor needed for this type of campaign, it could probably be done for \$30,000; however, I would strongly recommend using a professional ad agency, at least for the first time. A campaign of 10,000 posters, size 11 by 17 inches, could be accomplished for \$20,000 using an ad agency or \$10,000 if done using in house resources.

Although the poster campaign is less expensive, the direct mail brochures are more cost effective in that they reach almost the entire beneficiary population in Hawaii and they can be used to communicate additional information relating to other marketing ideas that will be mentioned later in the paper. In order to insure success and reduce the chance of wasting a considerable amount of money, the effect of the brochure and/or poster should be tested on a representative sample of beneficiaries before starting mass production and distribution.

Tripler would be the ideal military medical center to implement a market plan on the magnitude of a combined brochure and poster campaign. First, Tripler has always prided itself as an innovator in military medicine. Undertaking a professional marketing campaign of a hospital

definitely constitutes new territory for the military. Second, if any military hospital can afford such an effort it would be Tripler. Since Tripler is the Veterans Administration (VA) hospital for the State of Hawaii, it receives approximately five million dollars net profit each year for treating VA patients. A portion of these profits could easily finance a professional and sophisticated marketing campaign.

This marketing campaign could prove to be far more beneficial to Tripler than simply changing negative perceptions of military physicians. If beneficiaries believe that military physicians are the best, then this feeling could be perceptually transferred to every other aspect of care provided at Tripler by means of the Halo Effect. An analogy of this can be drawn from the automobile industry where the manufacturer is Tripler and the dealerships are the physicians. If the dealerships are successful then the manufacturer is successful. The overall outcome is increased patient satisfaction with respect to outpatient care at Tripler.

AMENITIES DOMAIN

The amenities domain consists of the following eight questions:

20. Overall, I am satisfied with the non-medical conveniences such as patient parking, clinic waiting time,

and the cleanliness of the hospital.

3. Lack of convenient parking is a problem.

6. The waiting time in the clinic was too long.

8. The television reception in the waiting room was excellent.

12. Housekeeping does a good job of keeping the clinic clean.

15. The amount of time between calling for an appointment and the actual date of the appointment was reasonable.

18. The furniture in the waiting room was comfortable.

22. Finding day care or a babysitter so that I can make my doctors' appointments is difficult (Answer only if you have children.).

Table 12 provides the results of multiple regression analysis of the domain where questions 3, 6, 8, 12, 15, 18, and 22 (independent variables) are regressed against question 20 (dependent variable). The full model has a R squared of 0.7054 and a F ratio of 7.52 at $p < .01$. This is statistically significant in that 70.54% of the variables accounting for amenities are found in this domain. Only three of these variables proved to be strongly associated with how the beneficiaries feel about the amenities domain in general. They are in order of greatest statistical significance: (1) parking, (2) clinic waiting time, and

(3) housekeeping.

Effect Tested	R Sqd	F Ratio	df1	df2
20. Full Model (Amenities)	0.7054	7.52***	7	22
3. Parking	0.2445	10.58***	1	22
6. Clinic Waiting Time	0.2902	7.17**	1	22
8. T.V. Reception	0.3328	3.99*	1	22
12. Housekeeping	0.3221	4.79**	1	22
15. Appointment Waiting	0.3834	0.21*	1	22
18. Furniture	0.3708	1.15*	1	22
22. Day Care	0.3737	0.94*	1	22

Notes: 1. * = N/S 2. ** = $p < .05$ 3. *** = $p < .01$

Table 12. Regression Analysis of Amenities

Table 13 rank orders the amenities factors using the mean scores. The lower the mean the greater the dissatisfaction.

Domain Ranking	Survey Ranking	Factor	Mean Score	Standard Deviation
1	2	Parking	1.960	1.309
2	3	Day Care	2.355	1.142
3	5	Clinic Waiting Time	3.000	1.340
4	7	T.V. Reception	3.102	1.159
5	11	Appointment Waiting Time	3.250	1.062
6	18	Furniture	3.880	0.689
7	19	Housekeeping	4.000	0.808

Table 13. Mean Scores for Amenities.

By far the single greatest source of dissatisfaction by patients is the lack of convenient parking. This finding is strongly substantiated in several ways. First, patient parking had a mean score of 1.960 which was well in the zone of dissatisfaction. This value also represents the second greatest factor of the entire survey for patient dissatisfaction. Second, parking belongs to the domain which has proven to be the most statistically significant domain. The number one dissatisfaction factor, 24-hour hotline, belongs to the education domain which was found not to be a statistically significant domain as a whole. Third, the parking factor was by far the most statistically, significant factor of the entire amenities domain with an F ratio of 7.52 at $p < .01$. Fourth, the comments to the

open-ended question which asked, "What two things should be improved in order to increase your level of satisfaction with outpatient care?" overwhelming addressed the issue of inadequate patient parking. This is of importance first of all because the question had a response rate of 72% which is extremely high for an open-ended question and secondly because 58.3% of these respondents stated that parking was a problem. The next most prevalent suggestion for this question only accounted for 27.8% of the respondents. The combination of the four facts stated above clearly demonstrates that convenient patient parking is the single greatest factor responsible for patient dissatisfaction with outpatient care.

Tripler is one of the few hospitals in Hawaii that has sufficient parking space for patients and staff. However, because of the medical center's unique construction on the side of a relatively steep hill, the problem is not one of non-availability of parking, but rather a lack of "convenient" patient parking. Appendix E uses a color coded system to differentiate between that portion of Tripler which contains the majority of outpatient clinics (blue) and that portion primarily associated with inpatient care and administrative areas (pink). The various parking lots are listed with such identifiers as F1 and E3. The areas highlighted in orange are strictly for patient parking and

the areas in green represent open parking for staff and patients alike.

Parking area F2 consists of over 200 parking spaces. This area should be reserved strictly for patients. Such action would be more than adequate to dramatically improve patient satisfaction with respect to convenient parking. Once the F4 parking lot is filled, the staff would have to park in areas D2, E2, and E3 which have in excess of 300 empty parking spaces at any given time during the day. Many of the staff will find such a change very unacceptable for two reasons. First, lots D2, E2, and E3 are on multiple tiers below Tripler. Depending upon which tier a person is parked on, the walk to the main entrance of the hospital is equivalent to walking up four or five flights of stairs. No staff member wants to make this type of walk every day. Secondly, the staff will be unhappy with the fact that the amount of time it takes to complete this walk along with the waiting time to take the elevator from the first floor to the fourth floor (entrance level for the Outpatient Wing) will be perceived to be excessive. In actuality, parking in the lower lots will only increase the commute time of the staff by approximately six minutes.

It is only appropriate that 200 staff personnel be inconvenienced as opposed to thousands of outpatients each day. By virtue of being employed at Tripler it is safe to

say that the staff in general is fairly young and in good health. On the other hand, many of the outpatients are ill, elderly, and/or accompanied by small children and infants. In order to reduce the negative affect on staff morale caused by this change in parking policy, Tripler should offer a shuttle bus service from parking lots D2, E2, and E3 to the main entrance of the hospital and the entrance to the Outpatient Wing. In the interest of cost efficiency, the service should only operate from 0615 - 0800 hours, Monday through Friday, which is the peak arrival time frame for staff during normal duty days. No bus would be needed in the late afternoon since the walk for employees going home would be all downhill. Another expense associated with this policy would involve manhours needed by Tripler security officers to enforce the policy.

From a marketing perspective, simply increasing the availability of convenient patient parking spaces is not enough to significantly increase patient satisfaction. Tripler must inform the public that it listened to its beneficiaries and acted on their suggestions for improvement. This demonstrates that the medical center "cares" about their patients. The ideal means of conveying this message is through the use of the direct mail brochure that was mentioned in detail in the previous section. Positive actions mean little if the population is unaware

that they ever took place.

Hawaii is unlike the continental United States in that there is a severe shortage of day care facilities. The ones that do exist have waiting lists of six or more months, are very expensive, and do not accept children on a short term basis such as a couple of hours on a specific day. Consequently, parents with children not in school find it extremely difficult to find an acceptable place to leave their child/children in order to make a doctor's appointment at the medical center. This concern on the part of the parents is clearly evident by the virtue of its mean score which ranked this issue as number two with respect to the amenities domain and number three overall for the survey in terms of patient dissatisfaction.

If Tripler were to open a temporary day care facility, the marketing value of sending a message to the military community that Tripler cares would be tremendous. In implementing such a plan, Tripler would be responsible for providing the facility and maintaining it. One possible location could be using a portion of Tripler's guest housing complex. This area is close to the hospital and even has an existing playground area. Additionally, Tripler would be responsible for hiring a staff of two to three full-time employees to manage the facility. This staff could be supplemented with volunteers from the various wives clubs or

retirees in the area in an effort to contain costs. Other means of financial support could be achieved through charging parents a minimal fee and through fund raising activities such as 10K runs and organization day. Given the high cost of living in Hawaii, the lower the day care fee the higher the marketing effect of increasing patient satisfaction. The full potential of marketing this service can only be achieved by advertising it in a direct mail brochure, as well as posters at the two main entrances to Tripler and in the pediatric and OB/GYN clinics.

The number four dissatisfier among the amenity factors and seventh overall for the survey is attributed to poor television reception in the clinic waiting areas. Tripler has been experiencing a reception problem for years. During this time the facility has tried on numerous occasions to rectify the problem using in house resources as opposed to an expensive contract with the local cable television service. Based on the results of the Patient Opinion Survey, renewed emphasis needs to be placed on this problem. If it cannot be resolved within a reasonable time frame such as three months, then Tripler should establish a contract with Oceanic Cable, at least on a limited basis, and be done with the problem.

Despite a growing sophistication in consumer awareness concerning health care, the fact still remains that

consumers are unable to evaluate clinical expertise. Consequently, consumers tend to form perceptions on the quality of care based on non-health care influences such as parking, day care, and television reception (McDonald, 1989). This concept is reinforced by the fact that of all four domains, the amenities domain proved to be the most statistically significant in terms of what patients most closely associate with in terms of satisfaction.

Two other factors contributing to patient dissatisfaction are excessive waiting times in the clinics and excessive amounts of time between calling for an appointment and the actual date of the appointment. These two dissatisfiers were reinforced by receiving the second and third highest number of comments to the open-ended question asking respondents to write down those areas needing improvement. Approximately 28% of the respondents mentioned long clinic waiting times and 22% addressed the issue of long waiting times for getting an appointment. Of the two, long clinic waiting time was by far the greatest contributor to dissatisfaction with an overall ranking of number five on the list of greatest dissatisfiers. This factor also proved to be the second most statistically significant factor within the amenities domain. When waiting time exceeds the patient's expectation, it is perceived as a lack of caring attitude (Piper, 1989). One

study indicated that 69.3% of all outpatient complaints reference long waiting times and this is due not to the long wait itself but to the fact that no one gave them an explanation (Inguanzo, 1985). This is an internal marketing issue of educating the NCOICs in each clinic to periodically let the patients know each day that the staff is aware that the patients have been waiting a long time and that the staff is doing everything they can to correct the problem. This is simply an inexpensive means of projecting a caring attitude to the patients. Although the amount of time between calling for an appointment and the actual date of the appointment proved to be a dissatisfier, its overall ranking as such was surprisingly low from what one would normally expect. Of the 21 factors in the survey, only 13 were found to be outright dissatisfiers or in the gray area/cause for possible concern. The appointment waiting time factor only had an overall dissatisfaction ranking of 11. The factors of clinic waiting time and appointment waiting time were addressed together because there is very little that Tripler can do from a marketing standpoint with these areas in terms of increasing overall satisfaction. These factors can only be improved with additional clinical staff. Since Tripler cannot directly control the numbers on the Table of Distribution and Allowance (TDA), the medical center should not waste limited marketing resources on a

lost cause.

The remaining two factors in the amenities domain deal with the quality of housekeeping services and how comfortable the furniture is in the waiting areas. These factors represent two of the top five satisfiers in the survey. The high quality of housekeeping is due principally to an excellent housekeeping staff and the fact that the new wing, which is predominately outpatient clinics, is only five years old and over 98% of the clinics in the old hospital have been completely renovated to look brand new. Concerning the factor of furniture, all the furniture is new, comfortable, and pleasing to the eye. Consequently, there is no need to address these factors in a marketing plan to improve outpatient satisfaction.

COURTESY DOMAIN

The courtesy domain was designed to measure the level of patient satisfaction with respect to the courteous manner in which the patients were treated by physicians, paraprofessionals, and the administrative staff. The domain consists of the following six questions:

13. Overall, the clinic staff was courteous to me.

1. The receptionist treated me as a person and not like I was just a number.

5. The doctor appeared to be in a hurry to complete my visit and did not spend enough time answering my

questions.

7. The nursing staff was concerned about my well-being and comfort.

10. The appointment clerk was courteous and helpful over the phone.

17. The doctor was pleasant and seemed interested in my feelings.

Table 14 shows the results of the multiple regression analysis of the domain where questions 1, 5, 7, 10, 17 (independent variables) were regressed against question 13 (dependent variable) and Table 15 rank orders the courtesy factors using the mean scores.

Effect Tested	R Sqd	F Ratio	df1	df2
13. Full Model (Courtesy)	0.4399	6.60***	5	42
1. Receptionist	0.2005	0.83*	1	42
5. Physician Time	0.1746	2.78*	1	42
7. Nursing Staff	0.1497	4.65**	1	42
10. Appointment Clerk	0.1102	7.61***	1	42
17. Physician	0.2116	0.00*	1	42

Notes: 1. * = N/S 2. ** = $P < .05$ 3. *** = $P < .01$

Table 14. Regression Analysis of Courtesy

Domain Ranking	Survey Ranking	Factor	Mean Score	Standard Deviation
1	15	Appointment Clerk	3.792	0.824
2	16	Nursing Staff	3.800	0.904
3	17	Physician Time	3.840	1.184
4	20	Physician	4.120	0.824
5	21	Receptionist	4.140	1.030

Table 15. Mean Scores for Courtesy

The full model for courtesy has a R squared value of 0.4399 and a F ratio of 6.60 at $p < .01$. This is statistically significant in that 43.99% of the variables accounting for courtesy are found in this domain. Of the four domains, only courtesy and amenities proved to be statistically significant in that patients' perceptions of satisfaction are more closely associated with these domains. Within the domain itself, only the factors of courtesy rendered by the appointment clerks and by the nursing staff were strongly associated with courtesy overall, with the appointment clerk being the most significant of the two. All five factors in the domain are listed as satisfiers based on their mean values and three of them are in the top five satisfiers for the entire survey. The fact that the courtesy domain was determined to be significant and all factors demonstrate overwhelming patient satisfaction speaks very highly of Tripler and its staff. The purpose of the

marketing program is to identify areas of dissatisfaction and make the most efficient and effective use of the limited resources available to reduce this level of dissatisfaction. Since the beneficiaries appear to be very satisfied with the courtesy rendered to them by all members of the staff, only minimal marketing efforts, if any, should be undertaken to insure patients continue to be satisfied with this domain.

There are several marketing ideas which are relatively inexpensive in terms of money and manhours which could be implemented to help insure the staff maintains its high level of courteous behavior towards the patients. First, Tripler could purchase approximately ten copies each of professionally produced videocassettes on customer service such as "How to Give Exceptional Customer Service" and "Professional Telephone Skills." These particular videotapes are sold by a company called CareerTrack. The tapes could be circulated amongst the various departments to be viewed by all new staff members as an initial orientation and by the rest of the staff on an annual basis. These tapes are short in duration, entertaining to watch, and will remind the staff on a regular basis of the importance of excellent customer service. A small investment of \$3,500 would purchase ten copies of each tape and would more than pay for themselves in terms of the benefits derived from increasing patient satisfaction.

Secondly, Tripler could inexpensively produce posters for each clinic using in house resources such as the medical illustrator and the government printing plant. The caption on the posters would read something like, "WE ARE HERE TO SERVE THE PATIENTS, Should we fail to live up to this statement in any way, please notify one of the following individuals: (1) SFC Williams (NCOIC), (2) CPT Johnson (Chief Nurse), or (3) LTC Martin (Clinic Chief)." These posters will help instill in the staff a corporate attitude of "We Care" and a sense of ownership to this concept by the leadership in each clinic.

Thirdly, courteous behavior that results in good customer service needs to be publicly rewarded in a tangible way on a regular basis. Every patient care area at Tripler has patient comment cards located in a prominent spot. All comment cards (Appendix F) which compliment members of the staff should be entered in a courtesy raffle. Each month one of these cards should be randomly selected and the winner should be presented with a gift certificate for a romantic dinner for two at one of Hawaii's premier restaurants. The presentation of the certificate could be done informally by the Commanding General in the winner's work area so that as many of the employees as possible can take a few minutes to share the occasion with the winner. Employees receiving at least three complimentary cards would

participate in a quarterly raffle for a weekend for two at a neighbor island. This visible public recognition serves two key functions. First, it acts as a motivator for the staff to treat patients in a courteous manner. Secondly, it lets the staff know that senior management places a great deal of emphasis on patient courtesy and is aware of the excellent reputation the staff has achieved in this area.

EDUCATION DOMAIN

The education domain was designed to measure how well Tripler performs in educating its beneficiaries on how to access the medical system, services that are available, and the availability of information on key medical issues such as how to prevent high cholesterol. The domain consists of the following seven questions:

16. Overall, I am satisfied with Tripler's efforts to educate its beneficiaries on available services and the importance of good health (cholesterol, blood pressure, diet, exercise...).

2. It is difficult to obtain information on how to make appointments at the various clinics.

9. Tripler promotes good health by periodically going out to the military communities and conducting educational activities such as health fairs.

14. Tripler needs a 24-hour hotline so that people can get medical advice from a registered nurse as to whether

they need to be seen by a doctor or not.

21 Brochures designed to educate the public on current health issues such as cholesterol, blood pressure, smoking, and exercise are available in the clinic.

25. The doctor was concerned about my overall health (blood pressure, diet, exercise...) and not just my specific medical problem.

28. I understand the differences between CHAMPUS, CHAMPUS Prime, and CHAMPUS Extra. (Do not answer if your age is 65 or over).

Table 16 shows the results of a multiple regression analysis of the domain where questions 2, 9, 14, 21, 25, and 28 (independent variables) are regressed against question 16 (dependent variable). The full model has a R squared of 0.1949 and a F ratio of 1.33 at $p < 0.27$. This is not statistically significant in that only 19.49% of the variables associated with education are accounted for in this domain. This is attributed to the fact that the factors associated with the education domain attempt to address a wide range of subjects that are not directly associated with each other. Consequently, as a domain, beneficiaries do not strongly associate education with patient satisfaction. Additionally, none of the factors proved to demonstrate any worthwhile relationship to education as a domain. Before the survey is implemented

again, these questions need to be listed under two separate and distinct domains or changed to specifically address a particular aspect of patient education. Despite the lack of statistical significance, each factor within the domain, in and of itself, is useful in determining dissatisfaction solely on the basis of their mean scores.

Effect Tested	R Sqd	F Ratio	df1	df2
16. Full Model (Education)	0.1949	1.33*	6	33
2. Appointment Information	0.0997	0.22*	1	33
9. Health Fairs	0.1046	0.02*	1	33
14. 24-Hour Nurse Hotline	0.0978	0.30*	1	33
21. Brochures	0.0670	1.56*	1	33
25. Education by Physicians	0.0883	0.68*	1	33
28. CHAMPUS Prime/Extra	0.0675	1.53*	1	33

Notes: 1. * = N/S 2. ** = $p < .05$ 3. *** = $p < 0.01$

Table 16. Regression Analysis of Education.

Table 17 rank orders the education factors using the mean scores. These scores should be interpreted as follows: (1) $1.0 \leq \bar{X} \leq 3.0$, dissatisfied, (2) $3.0 < \bar{X} < 3.5$, gray area/cause for possible concern, and (3) $3.5 \leq \bar{X} \leq 5.0$, satisfied.

Domain Ranking	Survey Ranking	Factor	Mean Score	Standard Deviation
1	1	24-Hour Nurse Hotline	1.700	0.516
2	4	CHAMPUS Prime/Extra	2.905	1.376
3	6	Appointment Information	3.061	1.265
4	9	Health Fairs	3.122	0.857
5	12	Brochures	3.265	0.995
6	14	Education by Physicians	3.680	1.151

Table 17. Mean Scores for Education

By far the single greatest dissatisfier of the survey based on the mean scores alone is the lack of a 24-hour telephonic, health information service where beneficiaries can receive advice from a registered nurse as to what they should do reference medical problems. This factor also had the second lowest standard deviation score of all the factors which indicates that all beneficiaries feel very much the same way on this item. In response to the question as to whether a 24-hour hotline is needed, 44% said agree and 46% strongly agree for a total of 90%. However, in order to put the importance of this factor into true perspective one must remember two other facts. First, the hotline factor is part of the domain statistically proven to be the least associated with beneficiaries perceptions of satisfaction. Second, the wording of the question is poor

in that it solicits a positive response. It mentions a beneficial service that currently does not exist and then asks the respondents if they think Tripler needs this service. It stands to reason that people are highly likely to support the implementation of such a service, especially when it is completely free. Having stated all this, it still does not totally negate the fact that a 24-hour hotline would be favorably received by the community and is a great marketing idea to increase patient satisfaction with outpatient care.

The hotline must be viewed as a costly and long-term marketing strategy. This operation would be manpower intensive, especially in an area where Tripler, like the rest of the nation, is experiencing tremendous difficulty in recruiting registered nurses. Additionally, these nurses would need to be among the medical center's best in terms of overall clinical expertise and people skills. Once such a service is implemented and the beneficiaries come to expect it and love it, Tripler would pay a high price if senior management were to decide to discontinue the service in the future. Such an action could result in beneficiary dissatisfaction that would not only negate the positive effect of opening such a service, but exceed it from a negative standpoint. Therefore, if Tripler decides to implement such a service it better be prepared to continue

it no matter what the cost should it prove to be well received by the military community.

An Ask-A-Nurse program would go a long way in terms of reducing patient anxiety by providing the beneficiaries with quick and easy access to medical advice for potentially serious and/or minor illnesses. This service is especially beneficial in a social medicine system such as the military where the care is free, but timely access to this care is often times felt to be excessive and at a price of great inconvenience such as long waiting times. Ask-A-Nurse would be extremely helpful in alleviating the fears of beneficiaries by giving them advice on whether they should be seen by a physician right away such as in the Emergency Room or whether it can wait until a regularly scheduled appointment can be made. In many cases, the nurses would be able to provide advice on how to care for many minor illnesses that would prevent the need for the beneficiary from having to come to the hospital. This would not only prevent the patient from being inconvenienced needlessly, it would prevent the waste of expensive medical resources such as physicians treating illnesses which do not require a physician's level of skill. However, even if the nurses told each caller that they need to be seen by a physician and directed them on how to best access the system for their problems, such actions go a long way in generating the

perception that Tripler truly cares about their well-being. As such, a 24-hour hotline program can have unlimited potential in increasing patient satisfaction and would be well worth the investment of the necessary resources. If such a program is implemented, the beneficiaries must be informed that it exists. The best marketing technique for promoting this program would be to make it one of the items advertised in the direct mail brochure. Since Tripler has a very specific audience, the brochure is by far the most cost effective and cost efficient means of informing the beneficiaries of all the positive aspects of receiving care at Tripler, as well as all the things that are being done to make things better for the patients.

The respondents indicated on the survey that they do not understand the differences between CHAMPUS, CHAMPUS Prime, and CHAMPUS Extra, the latter two being programs of the CHAMPUS Reform Initiative (CRI). The objectives of CRI are to increase access, improve continuity of care, and contain costs. These objectives are not reaching their fullest potential because the majority of beneficiaries are unaware of the benefits and therefore do not enroll in the program. Hawaii is a high cost of living area with a disproportionately high portion of eligible beneficiaries consisting of young enlisted soldiers and their families; yet, only ten percent of those eligible have enrolled in

CRI.

CHAMPUS Prime and CHAMPUS Extra are extremely difficult concepts to understand, especially by the average beneficiary whose understanding of just CHAMPUS alone is at the basic level at best. Currently, CRI is primarily promoting their programs by direct mail brochures. This marketing technique alone is ineffective because the information is too difficult to convey in writing to the lay person given all the various stipulations of the program. When people do not understand something they tend to ignore it and go about business as usual. It takes at least twenty minutes in a one on one counselling session to explain the benefits of this program to an average person in order to get him/her to the point where he/she can make a relatively intelligent decision as to whether the program is good for him/her or not. CRI needs to develop a professionally produced twenty minute video designed to explain the differences between CHAMPUS, CHAMPUS Prime, and CHAMPUS Extra. Copies of this video should be disseminated as widely as possible. As a minimum, the video should be provided to every military unit on Oahu that is large enough to offer a newcomers' orientation program and ask that it be included as one of the presentations. Additionally, the video ought to be shown in the clinic waiting areas at Tripler on a periodic basis.

One major means of improving patient satisfaction with a health care system is to provide the beneficiaries with options so that if they are unhappy with some aspect of care they do not feel they are trapped without any other alternatives to choose from. Just the fact that other options are available, even if beneficiaries chose not to exercise them, instills in the beneficiaries a sense of security which can translate into patient satisfaction. The Queen's Health Care Plan (QHCP) which manages the CRI in Hawaii provides Tripler's beneficiaries with options in the forms of CHAMPUS Prime and CHAMPUS Extra. Even though it is QHCP's responsibility for marketing these programs, Tripler must take an active role in supporting and overseeing these efforts. This is due to the fact that the beneficiaries believe that QHCP is part of Tripler. Since those beneficiaries which participate in the CHAMPUS Prime and CHAMPUS Extra programs are very happy with their benefits and associate this satisfaction with Tripler, it is definitely in Tripler's best interest to see that as many beneficiaries as possible are educated on the benefits of CRI. Consequently, Tripler should strongly encourage the development of a CHAMPUS Prime/Extra video and assist in soliciting support from the major military commands to play the video at all newcomers' briefings, Command Information briefings, and Non-Commissioned Officers Professional

Development classes. Additionally, Tripler needs to broadcast this video to all patient waiting areas on a routine basis. The end result of such efforts will be increased patient satisfaction with Tripler, especially in the outpatient care arena.

The third greatest dissatisfier with the education domain and sixth overall for the survey deals with the lack of knowledge on the part of the beneficiaries on how to schedule appointments with the numerous outpatient clinics at Tripler. Educating beneficiaries in this area will reduce their frustration with the system, thereby increasing patient satisfaction. Currently, many of the clinics have their own appointment clerks with direct telephone lines and the remaining clinics are serviced by the Central Appointment System (CAS). Appendix G is a copy of a section from Tripler's Patient Guide which provides this information. Once again, in order to insure wide dissemination of this key information, the back of each direct mail brochure should list all the outpatient clinics and the phone numbers for making appointments in each of these clinics. This type of information is of value to the beneficiaries and will result in their keeping the brochure for future reference. In so doing, the likelihood of the beneficiary taking the time to read the other marketing messages in the brochure increases each time the individual

uses the brochure to make an outpatient appointment. Consequently, this information plays a doubly important role in that it increases patient satisfaction and helps communicate the message that Tripler cares by increasing readership of the brochure.

The beneficiaries feel that Tripler should do a better job in terms of promoting good health by going out into the military communities and conducting educational activities. Question 31 on the survey asked the respondents to select from a list of health subjects the top five topics of greatest interest to them. The question also included space for them to write in any subjects not on the list. Table 18 rank orders all the topics by what percent of the respondents selected them for their top five list. Respondents seemed most concerned about their cholesterol level and cancer. It is interesting to note that learning more about CHAMPUS Prime and CHAMPUS Extra was number four on the list. This lends credibility to the need to market these programs through means of a video.

Rank	Topic	Percent	Frequency
1	Cholesterol Evaluation	12.1	29
2	Cancer (Breast, Lung...)	11.0	26
3	Blood Pressure Screening	8.4	20
4	CHAMPUS Prime/Extra	7.6	18
4	Nutrition Counselling	7.6	18
5	Dental Screening	7.2	17
6	Vision Screening	6.3	15
7	AIDS	5.9	14
7	Sports Medicine	5.9	14
8	Drug Abuse/Alcoholism	5.5	14
9	Quit Smoking	4.2	10
9	Child/Spouse Abuse	4.2	10
9	Hearing Exam	4.2	10
10	Newborn Care	3.4	8
11	Anti-Drug Puppet Show	3.0	7
12	Prenatal Care	2.1	5
13	Other	1.3	3

Table 18. Health Topics of Interest

Tripler should develop a standardized health fair with emphasis on the subject areas of greatest interest to the beneficiaries as shown in Table 18. The majority of these key topics are currently addressed in the Health Risk Appraisal Program designed specifically to go out into the community and military units. This program is operated by the Community Health Nursing Section. The health fairs should be held at each of the four major AAFES Exchanges on

Oahu at least once every four months. By conducting the fairs at the exchanges Tripler maintains high visibility, insures an adequate number of participants to justify the manpower and expense, and most of all makes it convenient for the beneficiaries because they already were coming to the exchange to shop. It is important when offering these education services that Tripler goes to the beneficiaries rather than having them come to Tripler. This perpetuates the "We Care" theme of Tripler which in turn increases patient satisfaction.

Another educational activity in the community would be to go to the military elementary schools and conduct health awareness presentations. These classes would emphasize the evils of drug abuse, alcohol, and smoking while emphasizing the importance of good hygiene, exercise, nutrition, and safety. The presentations would involve education through entertainment and audience participation by means of music, singing, humor, and magic. The classes could take the form of puppet shows or plays based on the Teenage Mutant Ninja Turtles. Kaiser Permanente of Hawaii has a full-time magician, Doctor Wizardwise, who gives this very type of class to approximately 360,000 elementary school kids each year. He teaches such things as the magic number to be used in times of real trouble - 911. This is a form of marketing to the adults via their children while providing a service

degree of retention (Luther, 1982). In order to achieve retention, a motto needs to be catchy, a real attention grabber. It should be unique and simple with as few words as possible in order to be easily remembered. A couple of the more effective advertising mottos in the advertising industry are "Have a Coke and a Smile" and "Fly the Friendly Skies of United", the latter having been proven to be the most successful motto in the history of advertising based on actual research.

Tripler's current motto "Concern, Care, and Service" fails to achieve the crucial criteria of high retention. A more effective motto is "TLC - Tripler Loving Care." The TLC makes the slogan catchy and easy to remember while Loving Care describes the benefit of the services provided at Tripler. Question 33 on the Patient Opinion Survey asked the respondents if they felt "TLC - Tripler Loving Care" was a good motto for Tripler Army Medical Center. The data showed 52.1% of the respondents agreed or strongly agreed with the statement while 39.6% were neutral and only 8.3% disliked the motto. Appendix H is a suggestion for a new logo which incorporates the TLC motto. Tripler should initiate a contest among the staff and patients to create a new motto and logo for Tripler with Appendix H being one of the entries. The winner of the contest should receive a prize that is worthy of encouraging serious competition

since the motto/logo will be the corner stone of Tripler's image, possibly forever. Once a panel has narrowed down the field to the top five entries, the medical illustrator should re-do the designs professionally. Finally, a representative sample of patients should be asked to select the winning design from the top five entries. Once a motto/logo has been selected, it needs to be incorporated into every aspect of marketing. It should be printed on all brochures, posters, and handouts. Additionally, it should be displayed on all internal documents such as the weekly bulletin, ceremony programs, flyers, awards certificates, and stationary. This is the key to instilling the staff with Tripler's corporate attitude of "Loving Care."

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS AND RECOMMENDATIONS

Despite still being in its embryonic stage, health care marketing for hospitals operating in a non-competitive environment such as the military constitutes the wave of the future. The purpose of this study has been to develop the framework upon which to build an effective marketing program for improving patient satisfaction for outpatient care at Tripler Army Medical Center. The long-term goal should be to improve Tripler's image to the point that Tripler is viewed as the premiere medical center within the Department of Defense in the minds of its beneficiaries. The four phases of a marketing program are: (1) planning, (2) market plan, (3) implementation, and (4) results and evaluation.

The key elements of the planning phase have already been achieved at Tripler. The senior management has instilled a corporate attitude of innovation within the organization. Tripler prides itself in implementing new and creative ideas in order to meet the challenges of the future. A marketing program is an ideal example of such innovative thinking. The Commanding General just signed Action Plan 95. This document embodies the strategic and tactical elements of a five year plan for Tripler. Senior management's support of marketing activities is evident in that the plan only has fifteen objectives of which objective number five states, "To enhance beneficiary perceptions of

Tripler." Task 5.3 within this objective specifically states, "Develop/implement a marketing plan" (Appendix I). This study developed a valid and reliable market research instrument that measures the level of dissatisfaction with outpatient care by the beneficiaries (Appendix A). The implementation of the Patient Opinion Survey fulfilled the requirement for a needs assessment of the external environment. Finally, the statistical analysis of the data was performed to determine which factors within the four domains of physician competency, amenities, courtesy, and education were significant enough in terms of patient dissatisfaction to warrant inclusion in the market plan.

The next phase of the marketing program is the market plan. It is extremely difficult to establish quantifiable objectives of a market plan when addressing a very subjective and complex emotion such as satisfaction. The statistical analysis showed no statistical significance between patient satisfaction and the demographic areas of status, rank, sex, age, or branch of service. Consequently, the target population cannot be narrowed down any further than all eligible beneficiaries at Tripler. The short-term goals of the market plan that can be implemented in a relatively short period of time and at minimal expense involve the following actions: (1) increase patient parking near the Outpatient Wing, (2) improve television reception

in the clinic waiting areas, (3) conduct more health fairs in the military communities, (4) implement an awards program to reward exceptional customer courtesy by the staff, and (5) develop an effective motto/logo. The long term aspects of the market plan will require a great deal of coordination/implementation time, as well as significant resources in the areas of money and manhours. These factors involve the following: (1) establishing a 24-hour information hotline staffed with registered nurses, (2) improving the competency image of military physicians, (3) establishing a day care center for visits not to exceed several hours, (4) educate the beneficiaries as to the benefits of CHAMPUS Prime/Extra, and (5) educate the beneficiaries on how to schedule appointments at the numerous outpatient clinics. The principle means of promoting the marketing actions stated above, as well as educating the beneficiaries are professionally produced direct mail brochures and posters. Good deeds are only effective when accompanied by good words. This is especially true when trying to reverse unjustified perceptions such as military physicians not being as competent as their civilian colleagues.

The third phase of the marketing program is implementation. A Marketing Committee, chaired by the Deputy Commander for Administration, needs to be

established. Members of the committee from the administrative divisions should include the Executive Officer and senior representatives from the Information Management Division, Contracting Division, and Resource Management Division. As a minimum, the clinical departments of Nursing, Surgery, Medicine, OB-GYN, and Pediatrics should send a senior representative to the committee. The committee's first order of business should be to prioritize the marketing factors previously stated based on the resources available. Tripler is in an ideal situation to fund a substantial marketing program given the fact that the medical center earns a net profit of five million dollars each year as a result of reimbursements for treating Veterans Administration patients. The committee must understand that an effective marketing program is a long-term commitment that requires a considerable amount of funding. Another function of the committee is to establish a realistic time table for implementing the short-term and long-term components of the marketing program. Immediate action needs to be taken to hire a full-time expert in the marketing field. This individual will be responsible for coordinating and implementing the decisions of the committee. Additionally, the marketing expert will be responsible for selecting and establishing a contract with a commercial advertising agency which specializes in health

care marketing.

The results and evaluation phase involve continuous feedback, immediate and long-term, in order to determine what modifications need to be implemented, as well as the degree of success achieved by the marketing program. Immediate feedback involves surveying a small, representative sample of the population on their impressions of promotional materials such as brochures and posters before beginning mass production and distribution. The long range feedback consists of implementing the Patient Opinion Survey at six or twelve month intervals. These survey results should be compared with past surveys to determine if patient satisfaction is increasing or not in the various areas. This will enable the committee to determine which marketing concepts are successful and which ones need to be reevaluated.

It is definitely in Tripler's best interest to implement a marketing program designed to increase patient satisfaction and thereby improve Tripler's image. Both parties concerned, beneficiaries and Tripler, substantially benefit from an effective marketing campaign. Patients are happier with the services provided by the medical center. Additionally, the outcomes from their treatment are improved because they have increased confidence in the care they received and therefore are more likely to adhere to the

treatment prescribed. Tripler's positive image increases as patient satisfaction increases. This improved image can result in such benefits as increased recruitment and retention of staff, increased level of community support, and reduction of malpractice suits. Finally, most major decisions involving resources such as funding for new programs and increased staffing are somewhat political in nature. If Tripler makes its leaders at Health Services Command and the Office of the Army Surgeon General look good by maintaining an impressive image due to increased patient satisfaction, then the chances of being rewarded with additional resources increases dramatically.

Competition is the name of the game for survival in the civilian sector and as such the implementation of marketing efforts will only intensify in the future. If civilian hospitals constantly market their image and Tripler does not, then Tripler can never expect to be viewed except as a second rate hospital whose only saving grace is that the price is right. Since Tripler is a non-competitive hospital, the most effective means of improving its image in the eyes of its beneficiaries is to increase patient satisfaction. This can be achieved by an effective marketing program which combines good actions with good words in order to educate and promote the positive aspects of receiving medical care at Tripler. Using this study as

the framework for an effective marketing program to increase patient satisfaction with outpatient care is the first step towards Tripler reaping the benefits on an improved image. Marketing Tripler is the wave of the future and the time to begin is NOW!

CHAPTER VI

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APPENDIX A
PATIENT OPINION SURVEY

PATIENT OPINION SURVEY



TRIPLER ARMY MEDICAL CENTER

The purpose of this survey is to identify ways to better serve the beneficiaries of Tripler Army Medical Center. Your opinions are of great importance. Please answer all questions as honestly as possible. If we have weaknesses, please let us know.

Your comments will be treated as strictly confidential.

Thank you for your time and cooperation in completing this survey.

CIRCLE THE MOST APPROPRIATE RESPONSE

Strongly Agree - 5
 Agree - 4
 Neutral - 3
 Disagree - 2
 Strongly Disagree - 1

- | | | | | | |
|---|---|---|---|---|---|
| 1. The receptionist treated me as a person and not like I was just a number. | 5 | 4 | 3 | 2 | 1 |
| 2. It is difficult to obtain information on how to make appointments at the various clinics. | 5 | 4 | 3 | 2 | 1 |
| 3. Lack of convenient parking is a problem. | 5 | 4 | 3 | 2 | 1 |
| 4. In general, doctors in the civilian community received better grades in medical school than doctors in the military. | 5 | 4 | 3 | 2 | 1 |
| 5. The doctor appeared to be in a hurry to complete my visit and did not spend enough time answering my questions. | 5 | 4 | 3 | 2 | 1 |
| 6. The waiting time in the clinic was too long. | 5 | 4 | 3 | 2 | 1 |
| 7. The nursing staff was concerned about my well-being and comfort. | 5 | 4 | 3 | 2 | 1 |
| 8. The television reception in the waiting room was excellent. | 5 | 4 | 3 | 2 | 1 |
| 9. Tripler promotes good health by periodically going out to the military communities and conducting educational activities such as health fairs. | 5 | 4 | 3 | 2 | 1 |
| 10. The appointment clerk was courteous and helpful over the phone. | 5 | 4 | 3 | 2 | 1 |
| 11. In general, doctors in the civilian community are better than military doctors. | 5 | 4 | 3 | 2 | 1 |
| 12. Housekeeping does a good job keeping the clinic clean. | 5 | 4 | 3 | 2 | 1 |
| 13. Overall, the clinic staff was courteous to me. | 5 | 4 | 3 | 2 | 1 |
| 14. Tripler needs a 24-hour hotline so that people can get medical advice from a registered nurse as to whether they need to be seen by a doctor or not | 5 | 4 | 3 | 2 | 1 |
| 15. The amount of time between calling for an appointment and the actual date of the appointment was reasonable. | 5 | 4 | 3 | 2 | 1 |
| 16. Overall, I am satisfied with Tripler's efforts to educate its beneficiaries on available services and the importance of good health (cholesterol, blood pressure, diet, exercise...). | 5 | 4 | 3 | 2 | 1 |
| 17. The doctor was pleasant and seemed interested in my feelings. | 5 | 4 | 3 | 2 | 1 |

CIRCLE THE MOST APPROPRIATE RESPONSE

Strongly Agree - 5
 Agree - 4
 Neutral - 3
 Disagree - 2
 Strongly Disagree - 1

18. The furniture in the waiting room was comfortable. 5 4 3 2 1

19. In general, doctors trained to be specialists (examples: cardiologists, orthopedic surgeons...) receive better training in military hospitals than in civilian hospitals. 5 4 3 2 1

20. Overall, I am satisfied with the non-medical conveniences such as patient parking, clinic waiting time, and the cleanliness of the hospital. 5 4 3 2 1

21. Brochures designed to educate the public on current health issues such as cholesterol, blood pressure, smoking, and exercise are available in the clinic. 5 4 3 2 1

22. Finding day care or a babysitter so that I can make my doctors' appointments is difficult. (Answer only if you have children.) 5 4 3 2 1

23. Overall, I am satisfied with outpatient care at Tripler. 5 4 3 2 1

24. Patient parking is not a problem. 5 4 3 2 1

25. The doctor was concerned about my overall health (blood pressure, diet, exercise ...) and not just my specific medical problem. 5 4 3 2 1

26. In national tests conducted to determine the technical expertise of doctors, military doctors receive higher scores than doctors in the civilian community. 5 4 3 2 1

27. The clinic staff acted like they were doing me a favor by treating me. 5 4 3 2 1

28. I understand the differences between CHAMPUS, CHAMPUS Prime, and CHAMPUS Extra (Do not answer if your age is 65 or over). 5 4 3 2 1

29. Tripler provides better care than any other military hospital where I have been treated. 5 4 3 2 1

30. What two things should be improved in order to increase your level of satisfaction with outpatient care?

a _____

b _____

31. If Tripler conducted health fairs in the military communities, which "FIVE" subjects would you be most interested in? (Circle 5 Letters).

- | | |
|------------------------------------|---------------------------|
| a. Cholesterol Evaluation | j. Anti-Drug Puppet Show. |
| b. Blood Pressure Screening. | k. Dental Screening. |
| c. Nutrition Counseling. | l. Prenatal Care. |
| d. AIDS. | m. Newborn Care. |
| e. Sports Medicine. | n. Child/Spouse Abuse. |
| f. Drug Abuse/Alcoholism. | o. Vision Screening |
| g. Quit Smcking. | p. Hearing Exam. |
| h. Cancer (Breast, Lung,...) | q. Other: _____ |
| i. CHAMPUS Prime and CHAMPUS Extra | |

32. What is the best military newspaper in which to distribute information about services available at Tripler and information on current health issues? (Circle 1 Letter).

- | | |
|------------------------|---------------------------|
| a. Military Hawaii. | e. Tropic Lightning News. |
| b. Hawaiian Falcon. | f. Hawaii Marine. |
| c. Hawaii Army Weekly. | g. None. |
| d. Hawaii Navy News. | h. Other: _____ |

33. "TLC - Tripler Loving Care" is a good motto for Tripler Army Medical Center. (Circle one Letter).

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

34. Additional Comments: _____

CIRCLE THE CORRECT RESPONSE OR FILL IN THE BLANK AS APPROPRIATE

1. STATUS:

- a. Active Duty.
- b. Dependent of Active Duty.
- c. Retired.
- d. Dependent of Retired.
- e. Other: _____

2. RANK (If patient is a dependent, please give rank of his/her sponsor.): _____

3. AGE (If patient is a child or adolescent, please give the age of the adult completing this survey): _____

4. SEX:

- a. Male.
- b. Female.

5. BRANCH OF SERVICE:

- a. Army.
- b. Navy.
- c. Marine Corps
- e. Air Force.
- g. Coast Guard.
- e. Other: _____

6. CLINIC:

- | | |
|-----------------------|----------------------------|
| a. Internal Medicine. | e. Adult Outpatient Clinic |
| b. General Surgery. | f. Pediatrics. |
| c. OB/GYN | g. Cardiology. |
| d. Orthopedics. | h. Emergency Room. |

APPENDIX B

IMPLEMENTING INSTRUCTIONS FOR PATIENT OPINION SURVEY

1. Introduction: Excuse me, my name is _____ and I am helping Tripler conduct a Patient Opinion Survey. Would you mind telling me your status i.e. active duty, dependent of active duty, retired, or dependent of retired. I hope you will be kind enough to give 10 minutes of your time to complete this survey. The purpose of the survey is to identify weaknesses in the way Tripler cares for its beneficiaries so that corrective action can be implemented. Your responses are strictly confidential, so please be as honest as possible.
2. If you approach an older person thinking his/her status is retired or dependent of retired and he/she is actually a VA patient, go ahead and ask him/her to complete the survey rather than risk giving him/her the impression that Tripler is not interested in the opinions of VA patients. However, do not count these surveys as part of your 25 surveys.
3. Wear your uniform that identifies you as a Red Cross volunteer.
4. Only survey patients who have just completed a clinic visit with a physician.
5. If you ask persons who fit the criteria for your 25 surveys and they choose not to participate, please keep track of the total number and their status.
6. Check to see that the individuals surveyed completed the entire survey before thanking them and sending them on their way. If an open ended question is left blank, ask them if they would mind giving you a verbal answer and then record their responses for them.
7. If the individuals being surveyed have difficulty with any questions or ask for clarification because it is not self-explanatory, keep a record of the questions and how many people had a problem with each of these questions.
8. If patients are not sure how to answer a particular question, remind them that this is a opinion survey and that they should select the response which they believe is most likely the correct answer.
9. Record how long it takes each person who is surveyed to complete the survey.

APPENDIX C

FACTORS RANK ORDERED BY MEAN SCORES

Ranking	Survey Question No.	Domain	Factor Description	Mean Score	Std Dev
1	14	Education	24-Hour Nurse Hotline	1.700	0.516
2	3	Amenities	Parking	1.960	1.309
3	22	Amenities	Daycare	2.355	1.142
4	28	Education	CHAMPUS Prime/Extra	2.905	1.376
5	6	Amenities	Clinic Waiting Time	3.061	1.265
6	2	Education	Appointment Information	3.061	1.265
7	8	Amenities	T.V. Reception	3.102	1.159
8	26	Physicians	National Test Scores	3.104	0.515
9	9	Education	Health Fairs	3.122	0.857
10	19	Physicians	Specialty Training	3.167	0.630
11	15	Amenities	Appointment Waiting Time	3.250	1.062
12	21	Education	Brochures	3.265	0.995
13	4	Physicians	Medical School	3.286	1.021
14	25	Education	Education By Physicians	3.680	1.151
15	10	Courtesy	Appointment Clerk	3.792	0.824

Marketing Program

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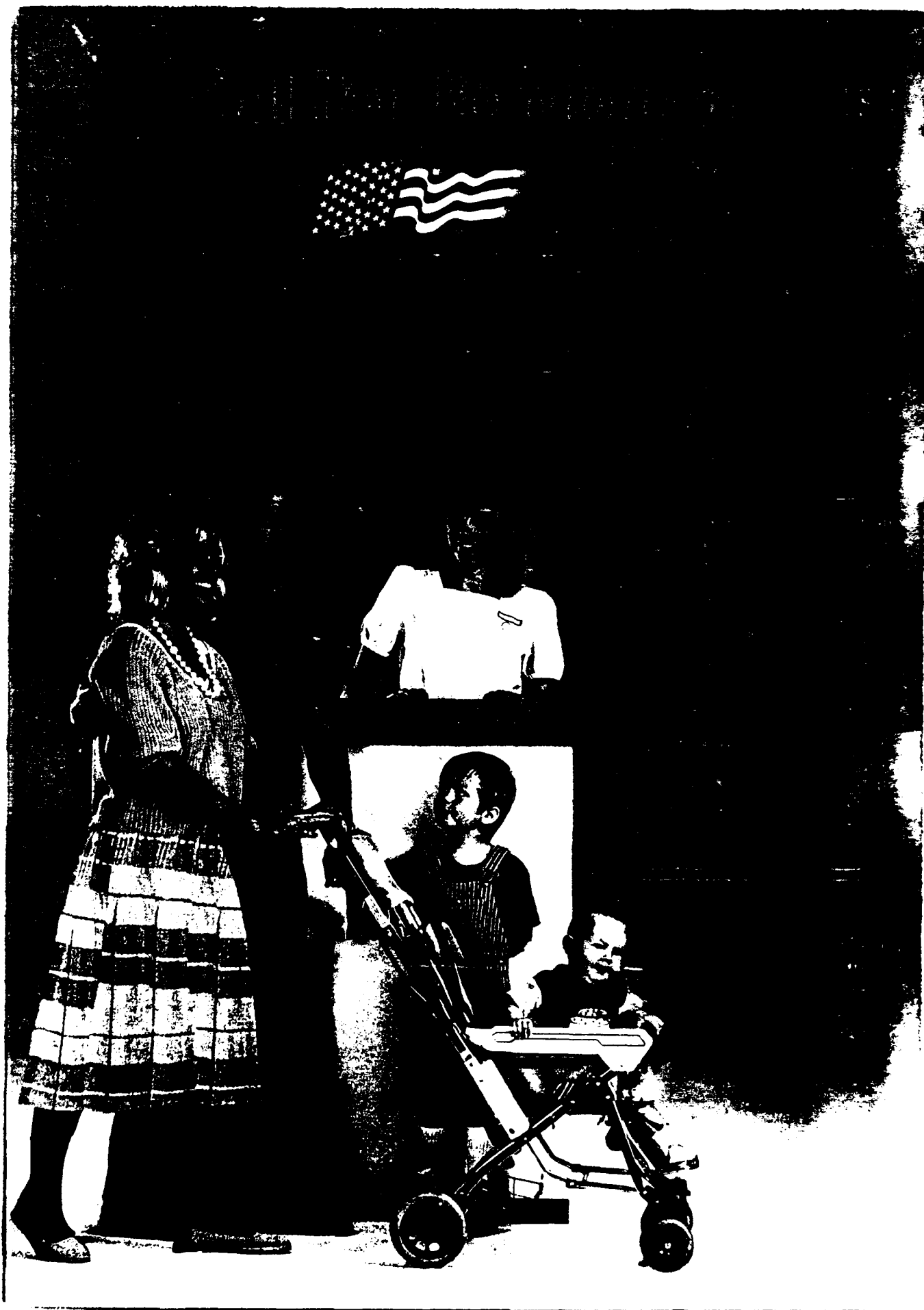
16	7	Courtesy	Nursing Staff	3.800	0.904
17	5	Courtesy	Physician Time	3.840	1.184
18	18	Amenities	Furniture	3.880	0.689
19	12	Amenities	Housekeeping	4.000	0.808
20	17	Courtesy	Physician	4.120	0.824
21	1	Courtesy	Receptionist	4.140	1.030

APPENDIX D

SAMPLE OF A DIRECT MAIL BROCHURE

Need Help With Your Military Health Care?





ABC
2

MNO
6

DEF
3

JKL
5

ABC
2

OPER
0

OPER
0

can rely on CMP civilian CHAMPUS
experts to answer your questions
simply and quickly.



C·H·A·M·P·U·S
MILITARY PREFERRED

Priscilla Romero

17-2134

EXACT NO. OF SPONSOR



C·H·A·M·P·U·S
MILITARY PREFERRED

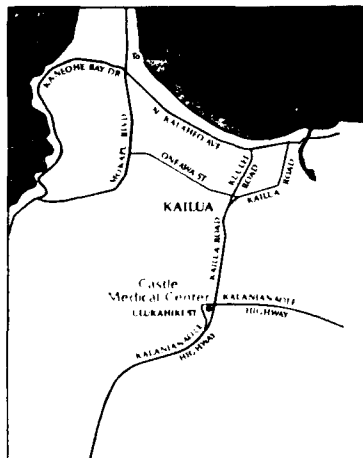
263-5200

One source for all your CHAMPUS civilian services!

As a member of the CHAMPUS MILITARY PREFERRED program, you have access to complete 24-hour emergency services as well as acute care hospitals featuring a wide variety of services and programs. The following services are available to CMP members, however, some services that are not benefits of CHAMPUS, may be offered at a discounted rate:

- Aerobic and Exercise Classes*
- Alcoholism and Addictions Program
- Body Scanner
- Cancer Care
- Cardiac Rehabilitation
- Cardiology
- Community Health Education Program*
- Coronary Risk Evaluation Program*
- Course in Basic Life Support for Cardiac Arrest*
- Eating Disorders Services
- Family Nutrition Seminar*
- Health and Wellness Vacation*
- Home Health Care
- Individual Fitness Testing and Performance Evaluation*
- Injured Workers Rehabilitation*
- Intensive Care
- Internal Medicine
- Laboratory
- Lamaze Classes*
- Lifestyle Weight Management Seminar*
- Mammography Screening*
- Medical/Surgical
- Mental Health
- Nuclear Medicine
- OB Tours*
- Obstetrics/Gynecology
- Occupational Therapy
- Ophthalmology
- Orthopedics
- Osteoporosis Screening and Evaluation Center*
- Outpatient Surgery
- Patient Education*
- Pediatrics
- Pharmacy
- Physical Fitness Testing Seminar
- Physical Therapy
- Positive Parenting Program*
- Pulmonary Evaluation Program*
- Respiratory Therapy
- Skilled Nursing/Intermediate Care Facility
- Social Services*
- Speech Pathology
- Sports/Orthopedic/Industrial Rehabilitation*
- Stop Smoking Plans/Clinics*
- Stress Management Seminar*
- Talks for Women*
- Ultrasound
- Urology
- X-ray

*Not covered by CHAMPUS, but available to CMP members



A service of:

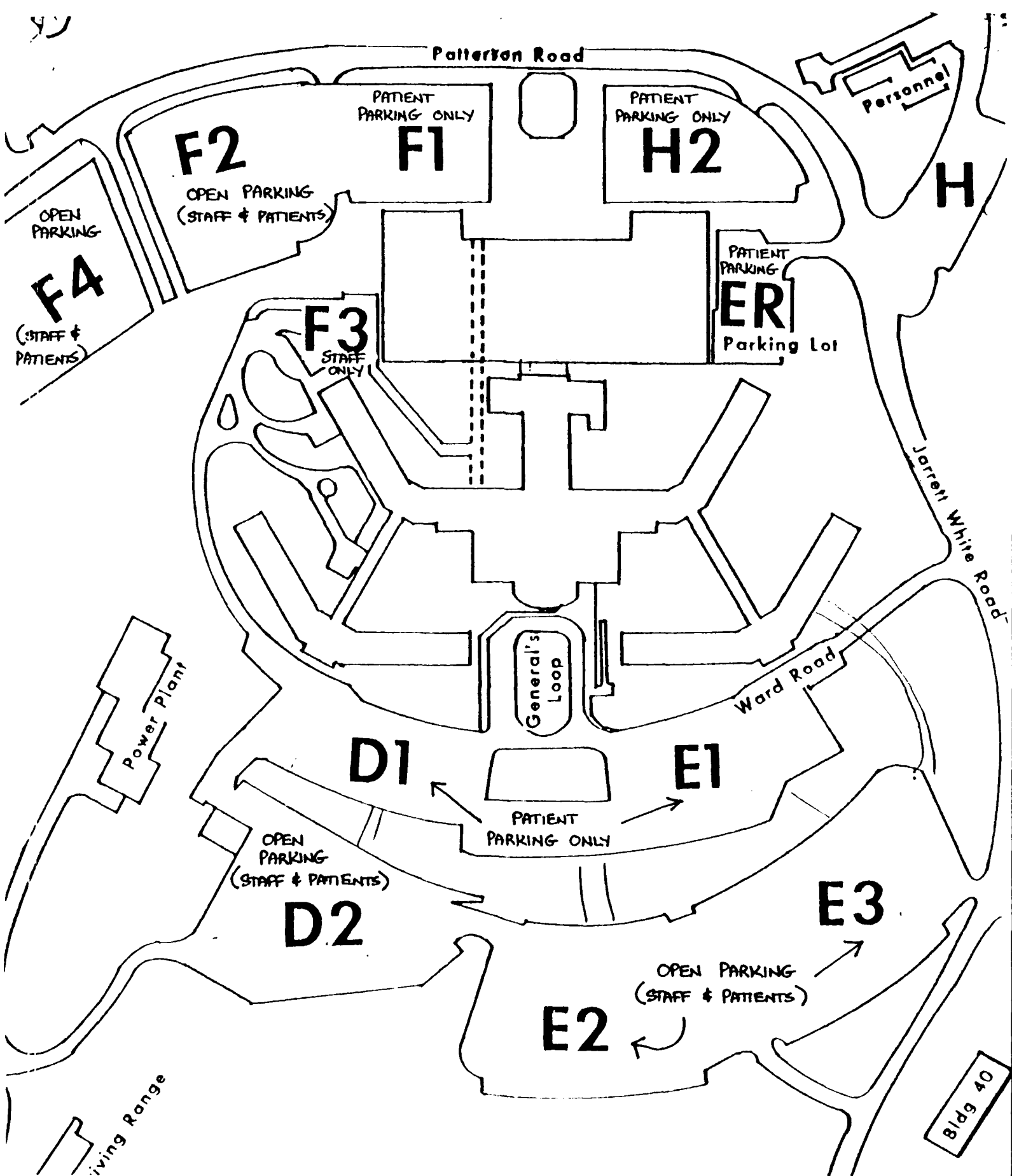
Castle Medical Center and Wahiawa General Hospital

CHAMPUS MILITARY PREFERRED is a service of Castle Medical Center and Wahiawa General Hospital, and has no official connection to the CHAMPUS, Department of Defense or the United States Government.

Marketing Program

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APPENDIX E
PARKING AREAS



APPENDIX F
PATIENT COMMENT CARD

*I would like your comments concerning your
experience at Tripler Army Medical Center today.
Please write your comments and send this card to me
or call the following number: 433-6336.*

Thank You,



GIRARD SEITTER, III
Major General, Medical Corps
Commanding General

-----Fold in half and staple-----

What Tripler activity did you visit today?

Was any person particularly helpful?

Was any person discourteous to you?

Any comments?

(Signature/Optional)

APPENDIX G

OUTPATIENT APPOINTMENTS INFORMATION

CLINIC INFORMATION

(Location and Hours)

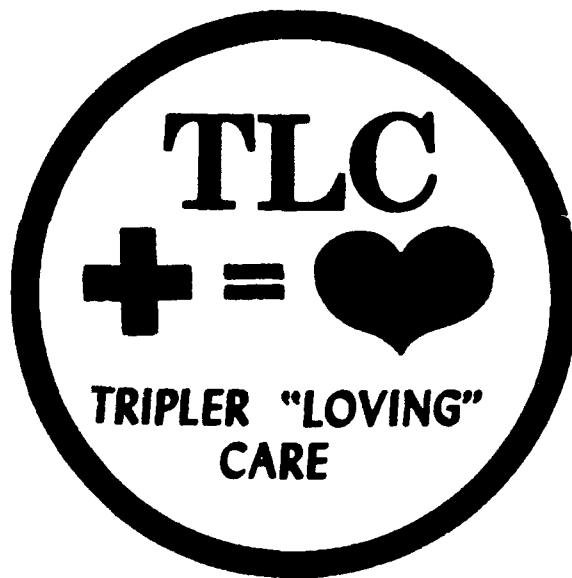
Clinic	Wing	Hours/Days	Appt. Sys.	Phone #
Adult Outpatient	3H	0715-1600, M-F	Clinic	433-5824/ 6605
Allergy/Immunology	2D	0800-1200; 1300-1630, M-F	Consult **	433-6332
Audiology	2E	0730-1630, M-F	Consult **	433-5742
Cardiology	4A	0800-1145; 1300-1630, M	Consult **	433-6730
Cardiothoracic Surgery	1E	0900-1100, Th	Consult **	433-5805
Dental	3C	0730-1600, M-F	Call-Clinic	433-5370
Dermatology	2D	0830-1130, M, T, Th, F	Consult **	433-5736
		0830-1300 Wed. Only		
ENT	2E	0730-1630, M-F	Consult **	433-5334
Eye	3E	0730-1630, M-F	Consult ** / CAS	433-6026
Hale Nui - Psych	Fort			
Internal Medicine	Shafter	0730-1630, M-F	Consult **	433-1929
Medical Specialties	3H	0800-1630, M-F	CAS/Clinic	433-6641
Hematology/Onc	4G	0800-1630, M-F	Consult **	433-5394
Rheumatology	4G	0800-1200, M	Consult **	433-5394
Nephrology	4G	0800-1200, M	Consult **	433-5394
Infectious Diseases	4G	0800-1200, M	Consult **	433-5394
Endocrinology	4G	0800-1200, M	Consult **	433-6518
Gastroenterology	4G	0800-1200, M	Consult **	433-6933
Neurology	2D	0800-1200, M	Consult **	433-5394
		0900-1200, M, T, W, F		
Neurosurgery	1E	0900-1300, T	Consult **	433-5714
Nuclear Medicine	3E	0800-1630, M-F	Consult **	433-5239
Nutrition Clinic	5A	0800-1700, M-F	Consult **	433-6636
OB-GYN	4H	0800-1600, M, W, Th	CAS / Consult **	433-5791
		0900-1600, T	CAS	433-6843
		Closed Friday afternoons except 1st Friday of month		

Clinic	Wing	Hours/Days	Appt. Sys.	Phone #
OB-GYN ER	4H	0800-1400, M, W, Th 0900-1400, T; 0800-1100, F 0900-1600, M-F except W (1300-1600)	Walk-in	433-5925
Occupational Health	4G	0900-1600, M-F	Walk-in	433-6835
Orthopedic/Podiatry Ortho-Brace Shop	4F 3G	0900-1600, T-F 0800-1200; 1300-1600, M, T, W, F 0800-1200, Th	CAS/Clinic **	433-6655
Occupational Therapy	3F	0730-1130; 1230-1630, M-F	Prescription	433-6967
Pediatrics	4F	0800-1100, M-F 1300-1600, T, Th, F	Consult ** CAS	433-5232 433-6696
Emergencies	4F	0800-1600, M-F		
Physical Exam	4G	0730-1200; 1300-1530, M-F	CAS	433-5775
Physical Medicine	3F	0730-1130; 1230-1630, M-F	Consult **	433-6428
Plastic Surgery	1 D-Wing	0730-1200; 1300-1630, M-F	Consult **	433-5318
Psychiatry	2B	24 Hrs., Daily, E.R.	Walk-in Clinic	438-6312 433-6060
Psychology	2B2	0730-1630, M-F	Consult **	433-5759
Pulmonary	4A	0800-1630, M-F	Consult **	433-6488
Speech Pathology	2E	0800-1400, M-F	Consult **	433-5756
Surgical	1E	0800-1200; 1300-1600, M-F	CAS / Clinic/Walk-in	433-6711 433-6708
Well-Baby Urology	4F 1 D-Wing	Call Clinic 0730-1600, M-F	Consult ** No Walk-in	433-5228
Vascular		1300-1600, T 1400-1600, Th	Consult **	

** These areas need a doctor's consult from the Adult Outpatient Clinic.

APPENDIX H

MOTTO/LOGO



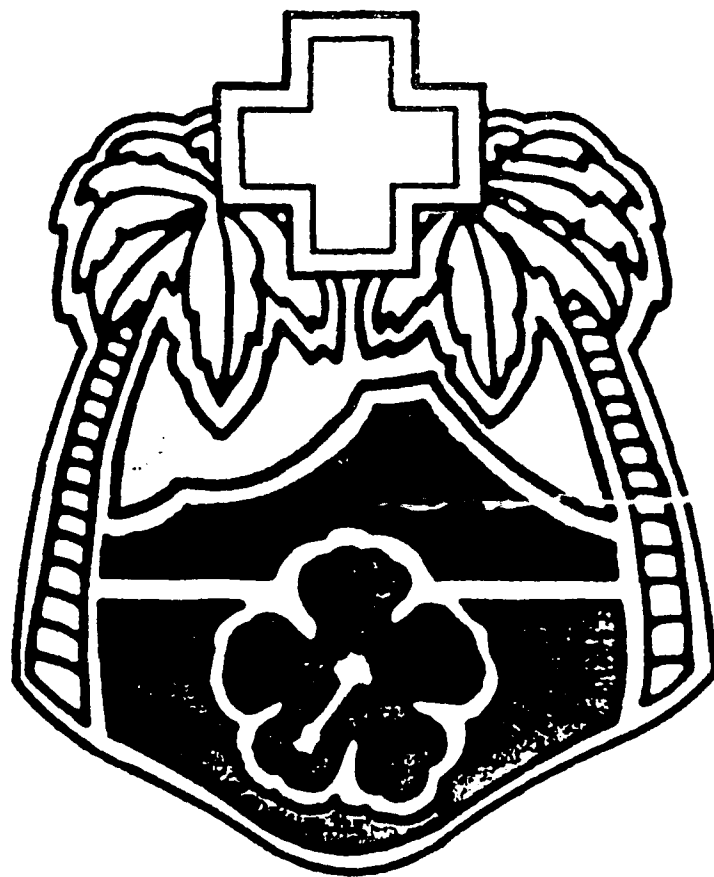
Marketing Program

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APPENDIX I

ACTION PLAN 95

TRIPLER ARMY MEDICAL CENTER



Action Plan 95

July 1990

OBJECTIVE 4: To maintain a high level of staff satisfaction.

<u>TASKS</u>	<u>COMPLETION DATE</u>	<u>RESPONSIBILITY</u>
4.1 Identify staff satisfiers/ dissatisfiers.	Jan 91	C, Psychology Service
4.2 Develop/implement initiatives to reduce/eliminate staff dissatisfiers.	Mar 92	DCCS/DCA
4.3 Develop/implement initiatives to enhance staff satisfaction.	Mar 92	DCA/DCCS
4.4 Obtain staff feedback on effectiveness of initiatives	Sep 92	C, Psychology Service

<u>INITIATIVES</u>	<u>COMPLETION DATE</u>	<u>RESPONSIBILITY</u>	<u>ADDITIONAL RESOURCES REQUIRED (if known)</u>
S-4a. Establish a child development center for staff utilization.	FY93	DCA	
S-4b. Establish a learning resource center for TAMC soldiers who live in the barracks.	FY92	Troop Commander	

OBJECTIVE 5: To enhance beneficiary perceptions of Tripler.

<u>TASKS</u>	<u>COMPLETION DATE</u>	<u>RESPONSIBILITY</u>
5.1 Identify existing beneficiary perceptions.	Jan 91	C, CSD
5.2 Identify local influence groups.	Jan 91	C, CSD/XO

5.3 Develop/implement a marketing plan.

Mar 92

XO

5.4. Reduce waiting times for appointments in high-volume clinics.

Ongoing

DCCS

<u>INITIATIVES</u>	<u>COMPLETION DATE</u>	<u>RESPONSIBILITY</u>	<u>ADDITIONAL RESOURCES REQUIRED (if known)</u>
S-5a. Conduct a nursing patient satisfaction survey.	Ongoing	C, Dept of Nursing	1 FTE
S-5b. Reduce admission/discharge processing time.	Oct 92	C, PAD	
S-5c. Improve the ability to locate outpatient records.	Jun 94	C, PAD	
S-5d. Expand utilization of pharmacists to screen and respond to patient requests for medication renewals.	FY93	C, Pharmacy Service	1 pharmacist
S-5e. Expand legal assistance services (electronic tax filing, adoptions, rental agreements, etc.).	FY92	SJA	\$70,000 1 GS-12 Attorney 1 GS-4 Clerk
S-5f. Procure additional orthopedic surgeons.		DCCS	
S-5g. Establish a 24 hour dial-a-devotion call in service.	Oct 90	C, Dept of Min & Past Care	None